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adjoining village, might receive land at a later date when that woman's daughter married, according to the rule, in her mother's home village. This kind of pattern is described by Hogbin (1967:24) for the Wogeo, who operate a system of land dowries in conjunction with second-degree patrilateral cross-cousin marriage.

Often land is granted, on a temporary or even life-long basis, to persons other than sisters or daughters. Land transfers may arise in a variety of social relationships which cannot be easily categorised. In Inonda, where the village domain is rather large, land is often lent by one lineage to another so that cultivation areas can be close together or contiguous. This is done because people like to work at not too great a distance from one another. In Sivepe, some land loans were made from a similar motive, mostly for rubber gardens. When migrants from Garombi[2] settled in Sivepe, several grants of land were made to them, both for taro and yam gardens. Such arrangements do not usually extend beyond the life time of the recipient although I do know of exceptions. If the gift endures, it signifies a close and permanent bond between families who may be unrelated by kinship.

From the viewpoint I have adopted in this work, two questions are of special interest in the analysis of land transfers: what social benefits are being exchanged between the partners; and what are the symbolic motives for using land as an object of mediation in these relationships? In order to approach these questions, I shall first cite some situations in which land transfers are of practical use and common occurrence:

1. Land transfers from wife's father to daughter's husband used to be very common, especially in the early years of marriage. A man was expected to help his wife's father with gardening and other tasks, and to stay with him for a year or so. During this period, the father-in-law gave the couple a garden for their own use. On occasion, this might be a garden to which the daughter had been granted a permanent usehold. This type of bride-service is very much on the decline today, as the payment of a substantial bridewealth in money acts as a substitute. I encountered the custom once or twice and found that the son-in-law regarded himself as the father-in-law's 'worker' or servant. We may therefore regard this type of land transfer as offering to the donor the satisfaction of seeing the receiver reduced in social status.

2. In the other types of cases I shall mention, transfers of land do not place recipients in a position of social inferiority. Certainly, in many cases harvest gifts are expected from the borrowers of land but these tend to be small in size and to lack any implications of status difference. For instance, many transfers are made by widowers. These men have a choice between attaching themselves to the family of a son, a daughter or a sister's son. In Sivepe, I found that each of these choices was made twice in a total of six cases with which I am familiar. In all the cases where an old man attached himself to a daughter or sister's son, he made transfers of land to those who looked after him. The choice he makes is prompted primarily by mutual affection but nonetheless his position is greatly strengthened by the knowledge that he has some tangible way of showing his gratitude, namely in the form of land. If he is unhappy with one relative and moves to another, some part of his inheritance will probably move with him.

3. Cripples and widows are often in a similar position. They may need a

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423 man to take responsibility while their sons are still too young. This man will
431 'look after' their land in an economic, political and religious sense and will restore
736 it to the son or sons when they come of age. But in the cases of which I have knowledge, some land is likely to stay with the protector, who often becomes an heir of the widow or cripple.

423 4. In all the cases mentioned so far land is an object representing
591 respectable status and exchangeable for services of a quasi-filial nature. The same
583 applies to most instances I know of uxorilocal marriage. Here it was usually the wife's relatives who desired the husband to stay with them, whereas the latter had no pressing reasons to leave his home village. They were generous in their offers of land, and no sensible man would move without such inducement. After the eruption of Mount Lamington, the survivors of the Sangara tribe, greatly reduced in numbers, offered generous land portions, on a wholly permanent basis, to men who would marry uxorilocally. Widowers dependent on the care of their daughters will encourage uxorilocal marriage in the same way. (The frequency of uxorilocal marriage among the Orokaiva is between 5 and 10 per cent.) In these cases it is clear that land donors are motivated by the desire to attract the son-in-law, and that the son-in-law is motivated by pleasure at the status he will gain as symbolised by the land he is allowed to 'look after'.

423 5. A very similar motivation may be found for the land transfers made in
425 Sivepe in 1966–7 to families who had migrated from neighbouring Garombi. Seeking an increase in population, Sivepe leaders frequently encouraged dissident
166 minorities in some neighbouring villages to join them. When the Garombi people came, a good deal of effort was made to obligate them and attract their friendship and loyalty. Two men gave useholds over gardens and one man gave a usehold over three yam gardens. It is likely that there were other transfers as well, just before I left the field and afterwards. One of the men who received a taro garden started using the donor's plant emblem when working in that garden, thus emphasising the closeness of the bond with the donor's family, as plant emblems are normally transmitted only by descent. Here the donors were motivated by a desire to attach the immigrants more closely to themselves, and the recipients gave friendship and loyalty in return. Here, as in uxorilocal residence, the migrants' willingness to settle in the village was itself treated as a benefit bestowed upon the local people by the migrants.

423 6. As already mentioned, the transfer of land to sisters and daughters is
428 very common. It is the rule that, in the absence of brothers and sons, sisters and
425 daughters should inherit land in preference to second degree kin. I know of several instances where absent brothers and sons were overlooked in favour of sisters and daughters resident in the village. Even if brothers and sons are living in the village, some land may be transferred to females. This will occur especially if a daughter's or sister's husband is known to be short of gardening land. In addition, it may occur for the kind of reasons given by Lawrence in his discussion of land transfers among the Garia, i.e. the enhanced status gained by the mother's brother when he acquires a junior follower strongly dependent on
[554] him. Among the Orokaiva where the majority of people marry close to home, a man's generosity to his sister may yield him quite a number of loyal supporters if the sister happened to have many children.

423 7. Land is sometimes made available by an individual *enda mama* for a
621
431

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between co-residence and commensality, notions which the Orokaiva themselves clearly do not regard as synonymous. Persons who are co-resident are always, in practice, at least in part commensal, they are not necessarily wholly so. Not only old people but also bachelors and young women, single or married, receive gifts of taro from other households of which they are the specific recipients. Food they receive in their own residence may therefore be classed as a gift if they have not supplied raw food to the housewife on the same day.

To what extent is there a notion that food gifts should be balanced as between donor and recipient? According to the statistics, perfect balance is uncommon and occurs most often where exchanges are somewhat infrequent. In Table VI/1, I classified households according to the degree of balance in all intra-village taro gifts made to persons resident in other households. The code number 0 indicates perfect balance in the total number of gifts sent and received; the code number 6 indicates an imbalance greater than the proportion 75:25. Intermediate code numbers indicate a lesser amount of imbalance. At first sight, Tables VI/1 and VI/2 suggest that little importance is attached to balance in food gifts. In more than half the households, the total imbalance exceeds the proportion 60:40. Nor does there seem to be an ideological charter enjoining a person who has received a food gift to return that gift in the near future. The donor says he expects no return gift. If one asks him why he has made the gift he never mentions services or gifts received in the past for which he may be reciprocating. He will say, "because that man is my wife's father's sister's son' or whatever the kinship relation may be.

A more careful look at the figures, however, makes one wonder whether such indifference to balance is the whole story. Some informants stated that though the donor expects no return gift, the recipient often likes to make one. Some families are more punctilious than others in this respect. The most punctilious of all was the leading family of Seho (H5, H12, H13, H14, H20, H21). They all had an imbalance smaller than the proportion 55:45. Only one other household in the sample achieved this low score.

In most of the households where there is an extreme imbalance, the explanation is that the household contains aged people who require help, or that the household is deeply involved in giving help to aged people. This factor accounts for the imbalance in households 1, 2, 3, 6, 7, 10, 18, 18a, and 19. The imbalance in households 8 and 9 is explained by the fact that householder 8 was helping householder 9 to build a house. Householders 5, 15, and 17 were immigrants from Garombi who gave more than they received, probably because of an anxiety to become accepted and build up good relations in their new place of residence.

Finally, the notion of balance is implicit in the timing of many of the taro gifts. It was a very common practice indeed to make a return gift on the same day as a gift of taro had been received, or on the day immediately following. Though informants told me they were under absolutely no obligation to respond so urgently or to respond at all, the record shows that in practice they frequently did so. We must therefore conclude that the Orokaiva do have some notions which lead them to reciprocate taro gifts, even though there is no rule enjoining immediate balanced exchange.

I would suggest that the Orokaiva proceed from a notion that taro is a

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611 men showed loyalty to their affines rather than their clansmen. He also noted a
614 widespread tendency for individuals to identify with the maternal rather than the
paternal clan. Evidence on land tenure, presented by Crocombe, Hogbin and
[428] Rimboldi, provides an impressive list of exceptions to the supposed rule of
patrilineal inheritance and points, in addition, to the feebleness of links between
the local groups making up a dispersed clan.

614 At the time of Williams' study, most Orokaiva villages were composed of a
621 single clan and comprised little more than six households. The Australian
361 authorities used a good deal of pressure to make the Orokaiva consolidate their
177 hamlets into larger villages which could be more easily patrolled, but by 1951
Belshaw reported that most Orokaiva still lived in hamlets. In 1966 I found a
good number of one-clan villages, with populations of around fifty, but the
majority of the people were concentrated in larger settlements in which at least
two local clan groups were residing together.

The local clan group was traditionally the smallest viable military unit, whose duty it was to defend the hamlet territory against outsiders. It had its own military leader, feasting leader, technical and magical experts. In the modern multi-clan village, the corporate scope of the local clan group has declined, as its functions have been taken over by the village. Village feasts, village boundaries, village leadership tend to take the place of the earlier local clan group institutions. Due to these changes, the unity of the local clan group has become more difficult to establish and maintain.

614 Crocombe, Hogbin and Rimoldi have provided full data showing that local
613 clan groups are often divided into a number of exclusive segments they call
'lineages', which are characterised by putative common patrilineal descent from an ancestor who could often not be named. It is certainly true that we find important units intermediate between the extended family and the local clan group. First, it is possible to list four names of such major units within the Jegase local clan group and the same number within Seho. But the term 'lineage' might be deceptive unless we define it more closely.

614 If we look at the clan segments in Sivepe (it will soon be clear why I prefer
613 not to call them 'lineages'), their real distinctive feature is that they either came
166 to Sivepe as migrants from the same village or as members of the same clan.
There is no evidence whatever that, in their village of origin, they would necessarily have been regarded as close kin. Their feeling of being closely related arose only subsequent to migration. The study of Orokaiva migrant groups, even comprising just a few families, easily reveals that they tend to consist of one core family to which others will rally, not because they are related by kinship but because they want to leave, are good friends of the migrating family and, most probably, have some kin or friendship links in the village where the group intends to settle. It is only after arrival there that they may, for ideological and political reasons, create the fiction of being close patrikin. A number of such groups fuse with earlier arrivals into larger units bearing a clan name adopted by all. Hence, for most purposes these smaller units are best described as 'clan segments', though it may be useful to refer to them as lineages when discussing informants' statements concerning the patrilineal ideology by which such groupings are held together.

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TABLE X/1

VILLAGE POPULATIONS AND CLAN ORGANISATION

Number of villages investigated: 15

Name	*Population*					
(a) One-Clan Villages:						
Ajoro	50	Tandai'undi				
Inonda	42	Andiriha				
Irihambo	30	Oripa				
Sombou	70	Pangaripa				
Kakita	24	Hatopa				
(b) Two-Clan Villages:						
Binduta	100	Jegase		Usohu		
Garombi	132	Sorovi		Betu		
Hamburata	91	Ehirari		Ohuru		
Kongohambo	96	Pugege		Ameti		
Sivepe	137	Jegase		Seho		
Torogota	65	Jeipa		Jaumbi		
(c) Four-Clan Villages		ve/ih	ih/av	av/so	so/ve[1]	
Hohorita	348	Oripa		Besupa	Sehopa	Horeppa
Sasembata	162	Garoha		Pekuma	Ato	Takone[2]
Soroputa	200	Seraopa		Jaja	Java	Timumu
(d) Multi-Clan Villages						
Kiorota	429				12 clans[3]	

Notes

[1] ve/ih etc. are made up of abridgements of the Orokaiva terms *veari, ihane, avunu, sose.* for which see Chapter X, 5.

[2] No marriages between Seraopa and Jaja are permissible today, but both clans marry preferentially into the Hamburata clans.

[3] This village was settled in 1958 by refugees from the Mount Lamington eruption who previously occupied a number of smaller villages, according to the following pattern:

Homumuta	1 Haripa	2 Penonupa	
Isivita	3 Jegase	4 Berekipa	
Bosisepa	3 Jegase	4 Berekipa	11 Seraopa
Tambore	5 Oetopa	6 Ahungata	
Taremuturu	5 Oetopa	7 Pusaripa	
Pinda	8 Isivupa	9 Juvaripa	
Kandata	10 Jepuripa		
?	12 Omborapa		

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583 528 616 Forms of dual organisation between pairs of reciprocating groups have always been of limited scope as the groups tended to reside apart from each other, and each group tended to have marriage exchange relations with several other groups at the same time. Even the short genealogies of Sivepe show evidence that the families of this village have been participating in no less than twenty-five reciprocating pairs of groups, the exchange sometimes consisting of no more [179] than one recorded exchange of women between two villages. Interestingly enough, it was Australian pressure towards village consolidation that emphasised [361] the tendency to dual organisation.

361 178 614 583 First of all, co-residence tends to increase the number of marriages between local clan groups which are thus thrown together. Usually, such local clan groups are already reciprocating pairs, but when co-residence is established, they begin to reciprocate at a greater rate. For instance, the Seho and Jegase local clan groups in Sivepe, comprising together sixteen households, are linked by seven current Seho-Jegase marriages. This was sufficient to define the seven Seho households and the nine Jegase households as standing in an affinal relation to one another.

614 621 166 616 In such a village the other households tend to be classified as adhering to one of the two dominant local clan groups. A few years before I came to Sivepe, Rimoldi and Waddel had both visited the village and recorded the presence of a third local clan group, called Timumu. On my arrival I found that this group, consisting of three households, had adopted the Jegase clan name, thus establishing a tidy dualist pattern between one group defined as agnates and a second group defined as affines. A few months before I settled in Sivepe, six households migrated there from Garombi. All the men were members of the Sorovi clan, though of different lineages. A year after they migrated, five of the householders were classified as part of the Jegase clan (by the use of sibling terms of address) while the sixth was classified as part of the Seho clan.

621 614 616 I found a similar pattern in eleven other multi-clan villages I visited. When I first inquired, I was mostly told that they were two-clan villages, the names of the clans being given in each case. Two of the villages were said to have four clans, two pairs of two. Whenever I sought detailed data, I found male householders belonging to additional clans. In Hohorita I was told that the front half was inhabited by two clans, and the back half by two further clans. In fact twelve clans were represented; when this came to light, my informants explained to me that the clan names I had been given at first were those of the 'main' clans. There seemed to be a strong ideological notion that a multi-clan village (or [582] village section) should consist of two local clan groups. Furthermore, this arrangement affects the marriage rules: once Timumu became joined with Jegase under the same clan name, marriages between the two fused local clan, groups became prohibited.

5. *Complementary Opposition in Village Topography*

If the reduction of multi-clan to two-clan villages had occurred only in Sivepe and a few other villages, it could easily be explained solely by processes of clan fusion which are prevalent throughout the area and which will be discussed further below. But I found it to be a regular feature of the

628 701 166 There were ordinarily no persons who could command the allegiance of the tribe as a whole, nor was there any status with authority to effect the settlement of disputes between different subgroups or their individual members. Sometimes persistent intratribal conflicts led to short-term migration or to a splinter-group's secession from the tribe. However, these disturbances were very minor in comparison with the 'flight, dispersal and migration' in general resulting from incessant intertribal[1] feuds (see p.35).

701 Kinship and local affiliation together were the basic principles by which subgroups of the raiding party seem to have been drawn up during attack and on which leaders[2] within the party based their rights to command specific combatants.

721 728 Retaliation was as important a motive for isoro as was individual and group prestige. It was 'rare if not impossible' for tribes to settle hostilities amicably by compensation, exchange of hostages or other means (Williams 1930:166, 170 ff., 311 ff.).

721 Conquering groups operating from within their established territorial frontiers seem seldom to have set out with the express aim of acquiring new land for settlement or even to have used the vacated land when they forced their enemies to withdraw.[3] Nevertheless, the Aiga people (mostly the Timbariundi, i.e., wanderers), for instance, are known to have migrated to their present territory by expelling another tribe and settling on their land.

The high value of the land on the volcanic slopes occupied by the people called 'Periho' and 'Wasida' (by Plant and Williams,

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[1] 'Intertribal', 'interclan', etc., are terms which we apply to relationships between any - i.e., not necessarily all - representatives of the units in question.

[2] In the course of a raid, some of these leaders would assume the role of isoro embo jigari, a man who should rally the slowest of his company in attack and protect the stragglers during withdrawal; the other class of leader was known as isoro kiti jigari, that is, a warrior who ordinarily directs raiding groups from in front and takes the initiative in tactical decisions. Kiti jigari is sometimes a term for leaders in ordinary village activities (kiti, the first, foremost; jigari, one who directs and controls an enterprise; cf. pp.51-3. See also Williams (W.23) who was told that in pre-contact times a renowned member of Sarahu clan would lead from behind in attacks by men of the Jegasi-Sarahu villages (of the 'Wasida' tribe).

[3] As the Sangara did to the Divinikovari, for instance (Williams O.12).

A,[See Category 721, p.35--Analyst]

428 before establishing a household. The older brother should in time provide the other with an equitable share of the land.

There is no system of primogeniture in theory or practice.[1] In one case, however, a childless man, who was adopted into the local branch of Jegase clan and has also married a Jegase woman, either has bequeathed his land to the leader of his wife's lineage who allocated it to his second son, or he has himself bequeathed it specifically to the boy (who was given his wife's deceased brother's name). Most of the patrimonial land and some land held by the woman are to be inherited by the elder son.

24 Turning to the extent of landholding, the 12 households studied hold 138 acres near Sivepo or 2.7 acres per head, all of it arable with the exception of little more than 1 or 2 per cent.[2] Some members claim to retain land in relatively distant areas where they or their forefathers originally lived. In cases where the Sivepo people had not exercised their rights to cultivate these land claims, no estimate of their size was made.

b. The history of local settlement

177 The territory of the mountain Orokaiva was opened up when a new road from Buna to the Yodda Valley goldfields near Kokoda was built in 1904. In this part of Orokaiva country individual tribes were not as isolated as elsewhere. Although the various tribes were initially described as being constantly warring, and likely to attack government parties,[3] peace was secure within 4 years. [121] Intertribal feuds were effectively suppressed, except for an occasional raid prompted by the docility of neighbouring tribes under the novel conditions brought about by the arrival of the [166] Europeans. Many tribes, including the 'Wasida', were able to settle on their outlying lands which formerly they had not occupied for fear of raids.

[464] Many of the people worked on the construction of the road, and later as carriers; by 1909 some had signed on for labour elsewhere

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[184] [1] In this way, the mountain Orokaiva differ from at least one other Orokaiva tribe, the Yega at Beporo (R. Dahsyne: personal communication).

[162] [2] This density is the equivalent of 237 persons per square mile (cf. 300-500 per square mile for Southern Chimbu, Brown and Brookfield 1959:74). The Saiho Census Division, on the other hand, has only about 75 persons per square mile; however, as Map 2 indicates, it includes extensive areas of unoccupied and generally unused rainforest surrounding the concentration of populations with higher densities and separating them from their former enemies. Some of the land of the thousands of Kombu Sangara killed in 1951 also appears to fall inside the Saiho boundaries.

[3] See Territory of Papua 1903-4:39; ibid. 1904-5:14, 36.

[TEXT CONTINUED ON PAGE 41]

in Papua (Territory of Papua 1908-9:19). In 1904, 4 village constables had been appointed from the peoples along the new road. By 1908 members of the various tribes were peacably trading with the carriers along the road (Territory of Papua 1907-8:22).

In about 50 years preceding the establishment of their present village the groups now represented in Sivepa had between them been involved in shifts of residence between a series of 14 village sites within an area of about 2 square miles adjoining the Soku River. Informants claimed that they or their ancestors moved from 11 of these under instructions from government officers to amalgamate into larger units. During this period members of several other descent groups have either accompanied them or established independent villages and worked land of their own in the same area. Intermarriage among contemporary villages there was common and individuals frequently moved from one to join kin in another.

The 4 Jegase lineages can trace the history of their groups back to a point of common origin in the first decade of the century in the village of Simbahata and its 'satellite' Totogata, both on what is now Jegase land hardly a mile from the present site of Sivepa.[1]

(i) Migration 1900-30: The Babahupa moved from Simbahata to Korigambata[2] and were joined by some members of Usohu living nearby.[3] Except for 3 families which moved out to form Kisisita, Aurija and Andahahambo villages, they remained there until about 1937 when they were asked by the Administration to reunite with those 3 to establish Korinasusu. One of the 2 major pre-war tracks from the coast to Kokoda lay nearby and when Japanese and Australian troops moved along this in 1942 the people abandoned the village and moved into isolated garden huts. Most villagers returned to Korinasusu after the war but 1 group founded Mahihita nearby.

In 1950 the Administration instructed the Babahupa of Korinasusu and Mahihita to join the Usohu people living in Gogovosusu and Binduta to form one large village. Up to that time the villages had been confined to Jegase land but because

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[1] For place names mentioned in this section see Map.2.

[2] Mentioned as a 'Jegase village' by Williams in 1923 (W.83), as are Sivepa, Pusahambo and Hanimkumbari (see pp.34-7). He also lists them as Awala villages.

[3] A number of the older Jegase men claimed that the Usohu people formerly regarded themselves as members of Jegase clan.

166 the Jegase people had no land on the Asula-Kendata road nearby,
36 where they decided to build, they acquired rights to house-sites
613 on the road on the land of the Be'ohushije[1] in return for rights
granted to some members of that clan to build on Jegase land 3
[425] miles away at Asula No.1. The Jegase people had begun to move to
[731] the new village, now Binduta, when Mt Lamington erupted. Although
they were outside the limits of the area of destruction the people
were evacuated for safety.

The Bebehupa, a small lineage, had accompanied the Bebehupa in their moves to Korogombata, Korinasusu and Binduta.

The Berekipa and the Arehu according to the men of Bebehupa, which is the dominant Jegase lineage, are groups which have attached themselves to the authentic part of the clan. The ancestor of 2 of the 3 Berekipa householders in Sivepo had also lived at Simbehata. It is generally conceded that he was a Jegase man but he left Simbehata to establish Euru village and then moved across the Sobu River to Hamburata several miles to the east near the present Kiorota, where he cleared and laid claim to virgin land about 1910.

[682] The father's father (b1)[2] of the oldest householder, another Jegase man from Simbehata village, was killed near Divinikovari in a feud with the Togahau people. On his death his infant son (c1) was adopted by his wife's brother at Hamburata village and his land was taken over by other Jegase men. The son had been named after a Timunu man[3] of Euru village who allocated a parcel of land for his use, when, as an adult, he returned from Hamburata relinquishing any land rights he held there. He gardened for some time on the land of his sister's husband, a Be'ohushije man but re-established rights to a number of parcels of his father's land which had been controlled by Bebehupa and Arehu lineages in his absence. He founded Pusahambo village on this land about 1920 and was joined by his wife's brother, a descendant of the first migrant from Simbehata to Hamburata. When he died at Pusahambo his sister's son (d2J) married his widow[4] and adopted one of his sons, now head of the second Berekipa household in Sivepo (d3J). This man's son is the third Berekipa household head (e2J).

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1 The Be'ohushije formerly lived in the nearby villages of Saunhambo and Hebereta and their land adjoins Sivepo village.

2 See Genealogy, p.52. A/A

3 For relationship between namesakes (tato) see Williams 1930:96.

4 See Williams 1930:132: 'There is no rule against marrying out of one's generation.'

A,[See Category 601, p.82--Analysis]

166 361 613 Neither the man nor his son has every cultivated his patrimonial land at Hamburata although they hunt and fish there. The man makes these periodic visits to affirm his rights as he claims that constant surveillance is necessary to forestall encroachment on his land. His father's brother controls the land in his absence.

By 1950 the members of the Berekipa households who numbered 12 had thus acquired only 5 parcels of land (totalling 9 acres) near Sivepa since the lineage returned from Hamburata 30 years before, and had to rely on other lineages for access to adequate land. [657] After the war the Berekipa were asked by the Administration to move from Pusahambo to a village called Pamba where Arehu lineage was living. They seem to have been largely dependent on the Arehu and on affines elsewhere for planting rights since then.

The Arehu people had founded Totogata next to Simbehata and remained there after the other Jegase people had moved on to Euru and Korogombata. Some members of Bebehupa lineage, in refusing to recognise Arehu as a genuine Jegase lineage, explain that it is an immigrant group descended from a Togahau man of Arehu clan[1] who was adopted as a child after a Jegase raid on the Togahau. The land the group now holds is centred on Simbehata and the Bebehupa, although they take little interest in it, allege that it was acquired when the Jegase man from Simbehata was killed at Divinikovari. The Arehu have retained and strengthened their rights over the years and to all effects have become absorbed into the local branch of the clan, extending their effective ties there by intermarrying with other lineages. When pressed, the only resident male (d4J) even answers questions about the position ascribed to him as one of the agnates in the local group by [578] stressing that he and his father married Jegase women, as if no more need be said. The grandson of the alleged original landholder has disputed the rights of the Arehu man to the parcel of land on which the old village Simbehata was situated.

[657] Several years after the ancestors of the Bebehupa left Simbehata the Arehu were told by a government officer to amalgamate with other Jegase people and with the members of Timunu and Seho clans from Euru and Asina. The village formed on Seho land was old Sivepa with its satellite, Pamba; most of the people stayed there until they fled the Mt Lamington eruption in January 1951.

The Pekuma and Hajejopa lineages of Timunu clan had both joined the Jegase and Seho people in founding old Sivepa. The fathers

[1] This clan today is represented in Sirembi village in Togahau Census Division and possibly in other villages there. In 1923 Williams (O.1) noted that they were also present in the villages of Pororí and Ohamba.

[TEXT CONTINUED ON PAGE 45]

of the 2 senior men of Sivepo had divided their allegiance between branches of the clan at Euru and Soroputa and had exercised rights to land near both places. Since the death of his father the Pekuma man (d1T) has lived first in Euru and then Sivepo with his mother's kin and later his wife's kin. He and his adopted son (e1T) hold 28 acres nearby but he has never cultivated the land his father used at Soroputa; he sometimes obtains the permission of his father's brother to collect the produce from trees his father planted (see p.24).A

About the time the older Majojopa man (d15T) established his household at Euru, he was involved in a dispute with his father's kin from Soroputa who wanted him to return or else relinquish his rights to the land his father had cultivated there before settling permanently at Euru. Like the Pekuma man he preferred to settle on the comparatively large landholdings (18 acres) near Sivepo and severed most connections with Soroputa.

... (ii) Changes following the 1951 eruption. Sivepo-Pamba and Binduta were a few miles outside the area destroyed by the major eruption. Referring to the population of these marginal areas Keesing (1951:3) says that 'after the first panic of scattering... local groupings were in the main able to reassemble in the regional camps with such official aid as was necessary'. Refugees from the west side of the mountain were collected from emergency encampments along the Kokoda road and taken to a regional camp first at Wairopa and then at Ilimo near the Kumusi River. The villages of the Jegase and Tamamu were included in the danger zone which was defined about 4 months after the first eruption. They were about 7 miles from the summit and the danger area extended for 8 to 12 miles around the active crater.

When the limits of the zone were determined about 3,000 people whose villages were not closed off or who could find kinsmen to live with in resettlement areas outside the zone left the refugee camps. Most of the 2,000 who remained for some time at Ilimo were from the villages such as Sivepo on the more fertile land higher up the west and north-west slopes. Members of our sample however left to live with clansmen or other kin at Awala No.2 on the main road. In the chain of fairly continuous settlements which grew along the road great uncertainty surrounded land use problems. There were frequent moves, uncertain titles, disputes over tenure, and conflicting authority among leaders from different local and kin groups.

Most of these villages were still partially dependent on emergency rations issued to them while breaking in new gardens. Some of the Jegase people in Awala had their own small pockets of land nearby where they planted emergency crops and foraged; some made excursions during the day into the closed area to collect

A.[See Category 428, p.34--Analyst]

621 current village of the other or from a village within a mile of it, in 11 cases from within a radius of approximately 3 miles of it (in fact an area only slightly larger than the 'neighbourhood'), while 2 spouses came from outside the tribe. Williams (1930:131-3) speaks of 'a certain degree of local endogamy'. The Aiga village '(in which there may be several clans)...cannot be called exogamous even in theory'.

Belshaw too (1951:15) pointed out that marriage is usually between people whose parents do not live far apart. For this reason he warned that amalgamation of nearby 'hamlets' after the eruption might increase tension between groups linked by marriage. [602] But relationships between affines in Sivepe appeared to be generally close and behaviour relatively informal and friendly when compared with other areas (e.g., Inonda).

621 Perhaps there is a similar contrast with former practice (see 606 Williams, ibid:106, 114, 128, 131). However, in 1924 in a third [578] area (the Ope or Aiga), the village, consisting as it might of intermarrying clans, was quite free from 'quarrels and ill-feeling' (Williams, ibid:315) and, moreover, it is 'not unusual' for a man to divide his time quite comfortably 'between the villages of his wife's people and his own' with the result that 'the relation between the father's people and the mother's people is, in practice, so friendly and intimate, that the child associates himself almost as readily with the latter as with the former' - 'so close is the intimacy between the two branches of the united family' (1925:407-8, 410).

●166 Individuals freely and frequently change their village of residence, whereas the villages are enduring units. During the years 1957-61 the population of Sivepe and Binduta together averaged 165: there were in the same time no less than 113 movements of individuals into or out of this couple of villages and, according to data collected by ourselves, at least 13 between the 2 villages. The government census statistics reveal neither the cause, exact destination nor frequency of movement by an individual nor are his age or marital status recorded.[1]

614 (ii) Formal features of the local patrilineal groups. In dis-
613 cussing the local disposition of clans, we have already taken 'clan branch' to denote the representatives of the clan living in one village. We retain the term not only for the Timunu group but also for the members of the 4 Jegase lineages living at Sivepe, even though these villagers do not constitute a group of co-resident agnates with functions to mark it as a distinctive unit within the

[1] Thus the figures do not differentiate between adults and children (see McArthur 1956:324-36).

facilitated the type of local movements that we noted occurred in the neighbourhood of Sivepo. However at times[1] the density 'on the ground' of villages of the standard size found in the other Orokaiva tribes may be misconstrued as a state of advanced fragmentation of settlement.

It should be noted that the limited amount of relevant detail on the areas where Williams worked[2] fails to indicate a significant difference in size between the Aiga village averaging 26 people at that time, and the Wasida village, with about 6 houses and a single-boys' house.

The Sivepo people have moved only singly or in small groups except when villages have been directed to amalgamate by the Administration. The villagers say that, except when they were evacuated to Ilimo refugee camp, they have never been forced to move from the area which had been held by their ancestors, or to rely on outside groups for access to land. Our evidence indicates that, except for limited expansion into unoccupied land early in the century, all the major shifts of residence of the sample clan branches have been confined to their own territory.

People who have moved to take up rights in other land have done so by exploiting personal ties of kinship or affinity. We found no instances of overlapping land claims at the clan or local branch level such as are found in other areas of Orokaiva territory where enough land was available for whole clans to move the location of their settlement some distance to unused land of a friendly group.

Belshaw (1951:3) observed that in the years preceding the Mt Lamington eruption

> there was much feeling among Government officers that the relatively poor houses of the district, and the small hamlets, should give way to new villages built on the 'Kohoda' pattern, that is a line of substantial houses built around a grassy village square.

The people tended to resist this change, but they had made some moves to amalgamate 'hamlets' (see p.34). He noted also that there was much movement between villages, and that it usually involved a man's leaving his father's land to live on that of his mother or his wife.

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[1] For instance, when the densely populated area stretching from Isivita to Isoge and Awala villages struck the writer of one generally observant report as 'literally a mass of small hamlets' some of them with no more than 20 members.

[2] See Williams 1930:7; W.1.

166 [342] Individual mobility is still high, as we have already noted. Mobility is facilitated by the fact that material for housing - *wange* timber framework, blackpalm floor, walls and roof-thatch from sago trees[1] - is usually readily available and houses have an average life of only 4 years.

36 [621] The patrol of 1948 which found this area 'literally a mass of small hamlets' alludes to a possibility that the proliferation of these groups had become conspicuous only 'since the Japanese invasion'.[2] The long-term trend after the 1951 eruption, the next catastrophe to cause displacement of population comparable with the wartime upheaval, was towards effective consolidation instead of the proliferation of small groups, such as the scattering of post-invasion days.

36 178 62 [177] When people began to leave the evacuation camp there was a spontaneous trend, which was encouraged by officials, towards building larger villages or, alternatively, clusters of 'hamlets' within sight of each other (Belshaw 1951:5 ff.).

Plant (1951:6) and Belshaw (1951:6) suggested the following reasons for this tendency: that reconstruction would be easier if large numbers of neighbours co-operated; that the renewed interest in co-operatives led to a desire for larger groups; that the example of Ilimo Camp had given people the notion that larger groupings were correlated in some way with higher standards of living; that the Europeans, whose goodwill was now evident, favoured bigger settlements; and finally that their common disastrous experience had reinforced their sense of unity.

62 Although the present-day villages are smaller than those established at the start of the resettlement before the danger area had again been occupied, they are considerably larger than their counterparts of pre-eruption days: Belshaw (1951:2) says that the population of 'hamlets' in the area was of the order of 20 to 80 and the population of the 'hamlet group' under one name ranged from 150 to 400. At present in the Saiho Census Division the average population of the residential unit, in nearly every instance a nucleated village, can be no less than 175.[3]

[613] [1] Some informants stated that materials (except sago) could be collected from any village members' land but most claimed they sought wood only from lineage land unless invited to use trees by particular kin from other groups.

[2] This report was probably the major source of Belshaw's and Keesing's information on the pre-eruption situation.

[3] We do not know the average size of a group of villages known by a 'hamlet group' name such as Awala, Waseta, etc.

[21] At the time of resettlement these writers drew attention to the possibility that the composite villages would eventually be disrupted either by aggravated friction between members of different clans who had not lived together before or by the unsuitable siting of the settlements with regard to access to the villagers' own gardening lands.

[754] [166] The first problem was solved by individual mobility. Our own experience which is confirmed by the observations of patrol staff is that fear of sorcery, which follows tension within the village, is one important example of the vicissitudes of social relationships which are responsible for much of the movement from one village to another at present.[1] But the problem of the location of gardens in relation to residence was solved in time wherever people moved from the main road or other temporary settlement areas to new sites on or near their old land.

This land use problem was peculiar to the exceptional resettlement conditions and Keesing seems not to have considered this point when he concluded that the formation of larger villages was incompatible with the economic base of shifting agriculture. His prediction that people would continually 'hive off' into hamlets of a dozen houses consistent with their familiar system of seasonal shifting gardens does not seem to have eventuated.

The scattering of an individual's land interests over a neighbourhood facilitates mobility between adjacent villages because after moving, for whatever reason, he can often continue to [06] exploit rights to those lands which are at a convenient distance from his new village. We found, however, no evidence to suggest that shifts of residence are determined by a continual need to clear new areas for cultivation even if these areas lie scattered near a number of villages.

[71] [24] [36] Residential mobility is not as closely correlated with changes in gardening sites as it is among the Chimbu even though, as Williams says, the Orokaiva move their garden sites frequently. Among the Chimbu, on the other hand, where a long cultivation period usually of at least 4 years, sometimes broken by short fallow periods (when the area of cultivation within the plot is shifted), is followed by long fallow periods of varying length up to about 20 years (Brookfield and Brown 1963:52), 'the principal factor determining residence is land; most men prefer to live near their main blocks of currently cultivated land' (ibid:97).

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[1] Other examples are disputes between kin, and life-crises. About 1956 the oldest Bebehupa man left Binduta to spend his last years at Mahihita, an area to which he has been emotionally attached for much of his life. One or 2 close kin went to look after him and a series of other Bebehupa have followed.

241 With the passage of the cultivation cycle over a Chimbu sub-
171 clan's territory, gardeners move from one man's house to another,
361 either as a persisting group of agnates working contiguous hold-
ings, or as individuals joining more transient groups which are
dissolved as gardens near the house revert to fallow (ibid:98)
Brown and Brookfield 1959:68). As they extended their cultivation
to other areas, 37 per cent of a sample of 193 men had moved from
one man's house to another over a period of 16 months (Brookfield
and Brown 1963:98) and the men's houses themselves last no longer
than 5 years (ibid:12).

241 In Sivepa on the other hand, gardens tend to be scattered and
isolated. Father and son often have adjacent plots in one garden
area but the son usually has at least 1 other garden elsewhere.
A young married man often has 1 garden on the land of his wife's
father, whom he will periodically assist in his garden. Older
men in general adopt the technique of progressively planting and
clearing a single large area while younger and more active men,
usually with more obligations to affines, tend to cultivate
several scattered smaller plots.

[621] There is no local group or extended kinship group which
[602] commonly combines to make a block of contiguous gardens. Even
when all members of the village plant simultaneously for a special
feast, the gardens are not adjacent. A man usually takes advan-
tage of the choice of exercising planting rights on the land of a
wide range of kinsmen (not necessarily his agnates), both those
within the village and to a lesser extent kinsmen from other
villages. Several had current gardens on their mother's brother's
land, some on the nearby land of their wife's brother, sister's
husband or daughter's husband.

613 In other Orokaiva areas (such as Inonda) gardeners of one
614 lineage often have a reciprocal arrangement with another lineage
184 of the same clan in the village to cultivate a parcel of their
land with them, but this is not a common practice at Sivepa. In
the few cases where several kinsmen have made adjacent gardens
the gardeners are mostly cognatic kin from different clans or
villages and each will probably make his next garden with differ-
ent kin or on an isolated parcel.

166 Encroachment on boundaries is feared[1] but does not seem to
M result in repeated changes of residence as it does among the
425

[578] [1] The 3 instances of boundary disputes recorded were between Bebehupa and Usohu people. According to the older men the Usohu were formerly a Jegase group and they share many boundaries with the Bebehupa; the recent split in Binduta between the 2 groups has been accompanied by friction over a number of issues including the definition of boundaries.

Table 5

423 613 614 Rights to land currently cultivated by the sample

Nature of planter's rights to the land currently gardened	No. of gardens	Area of gardens (acres)	
1. Planter is a member of lineage holding proprietary rights	15	9.17	
2. Member of a different lineage but same clan branch	5	2.57	
On land of planter or co-resident agnate			11.74
3. Member of a different clan within the same village	10	4.49	
4. Member of another branch of the same clan	1	0.10	
5. Member of a different clan and village	3	1.51	
On land of others			6.10
	34		17.84

Notes: 1. Of the 5 members of other clans or villages who were using the sample's land, 2 were using the land of their mother's brother's sons, 1 the land of his sister's son and 2 the land of members of their dispersed clan branch in a village other than their own.

2. For rights to land carrying cash-crops see Ch.4, Section c. and Ch.5, Section b.

● 166 171 425 Chimbu or to influence the choice of a garden site; a Sivepo man shares land boundaries with many gardeners but his prescriptive rights to his holdings are not so constantly jeopardised if he fails to cultivate his land while neighbours are using adjacent areas (see Brown and Brookfield 1959:25).

Moreover with short periods between successive cultivations and with necessarily extensive total areas used for cultivation a man claims to be able to fix boundaries on fallow land in some detail. These are either demarcated by large trees or shrubs at fixed points or coincide with the courses of the numerous creeks or with [614] roads. The boundaries common to members of different clan branches appear to be neither more nor less clear than those shared by smaller groups.

A. [See Category 248, pp. 83-86; Category 248, pp. 87-93; Category 423, pp. 98-99--Analyst]

464 166

b. Employment

Ten people who are siblings or sons of the householders in the 2 subclans are absent from the village. Eight are employed in other districts of Papua as clerks, policemen or technicians. Two men, a single man and a widower, have left to work elsewhere in the district.

Five of the 10 absentees are the youngest sons in their families but their absence does not seem to be directly attributable to a heavy demand on their families' land resources. These who have left the district are people who had the advantage of local education facilities which were not available formerly and they hold semi-skilled positions which offer more prospects of permanent employment than most of the present householders had.

[671] Only 5 adults in the sample, 2 men and 3 women, have had any formal education. One of the men attended school for 4 years, the other for only 1 year. Five of the 7 householders in the 45-65 age group were employed outside the district on European plantations for 2-3 years before the war, 3 of them as rubber tappers. These men served a total of 7 years as carriers during the war. Apart from the years of service as a paid village official or local government councillor only 2 of them have taken work since the war - 6 months each as casual labourers on a plantation near Popondetta. The 2 other householders of this age have never had paid work. The men between 25 and 35 years have spent an average of 7 years in employment outside the village as against the older men's 3 years.

464 The frequency and duration of the younger men's terms in employment are set out in Table 9.

Table 9

Years spent in employment

Household No.	From date of first employment until birth of first child			Since birth of first child		
	Total years	Years in employment	No. of jobs	Total years	Years in employment	No. of jobs
1. (e2J)	5	3.5	3	4	Nil	Nil
2. (d10J)	5	3	3	11	2.5	3*
3. (d11J)	13	9	4	No children**		
4. (e3T)	10	8	5	6	1	2
5. (e1T)	4	3	2	14	6	7

*Householder took further employment soon after our survey.
**Householder had child by first wife but lives elsewhere; he is still employed.

464 The older men in the sample were restricted in employment
166 opportunities to indentured labour usually outside the Northern
[466] District. The young men on the other hand readily leave village life temporarily to take casual work on European plantations in the district where there is now a greater demand for labour. They may leave their wives and children to be provided for in the meantime by the other side of the family or may have them accompany them to the area where they are employed. These absences interrupt the routine of subsistence activities for the family but the possibility of this course of action is left open by local environmental conditions and the virtual independence of the nuclear family as a gardening unit. There is little seasonal variability and this small group is free to resume any phase of garden activities when and where it chooses.

431 Among the 5 able-bodied and active men of the senior group there seems to be no consistent demand for cash which cannot be met by gifts from their kin or affines and they have sought temporary employment only as a means of meeting some immediate financial requirements. With the exception of the salaried local government councillor the older men received 78 per cent of their total year's income of $88 as gifts.

434 By taking employment more frequently the younger men acquire
454 income which they gradually spend on the range of consumer goods available locally as well as on kinship obligations. However, not all income is spent in this way and, as Belshaw found in this area (1951:11) there is both some capital available for investment and a willingness to contribute money to funds for this purpose if they can be organized.

The men who have spent most years in paid employment also supplement their income by producing rubber and coffee, sometimes with the assistance of their fathers. However, no one has invested heavily in these crops and they provided only $32 or 15.8 per cent of the sample's income for the year.

245 c. Commercial agriculture

(i) Coffee. Four householders in the sample have individual coffee plots with a total of 503[1] trees on 1 acre of land. One of these plots is a section of a former village or 'company' coffee plot. About the time of the opening of the Higaturu Council in 1956 members of Jegase, Timumu and other groups in Sivepa and Binduta villages participated in the planting of 2 'company'

[1] The agricultural census of 1964 recorded 1,100 trees held by 5 growers in Sivepa as a whole (162 were not yet 6 years old and 491 of the trees had been planted more than 10 years before).

Chapter 5

The land and economic development

a. Shifting cultivation and residential stability

Under the present system of horticulture the amount of land surplus to current subsistence needs is small and imposes limits to expansion of commercial agriculture.

Williams (1928:154) regards the system of subsistence cultivation as wasteful because it requires such a large area per person. However, the practice of shifting gardens frequently and for short periods on scattered plots does give maximum yields and maintains soil fertility. Brookfield and Brown (1963:166) point out that no successful alternative to land rotation has yet been proven for subsistence agriculture in the tropics. Population pressure and soil fertility are not sufficiently serious problems on the slopes of Mt Lamington to warrant the measures which Fisk (1962) recommends in other circumstances.

Keesing (see Chapter 3, Section e) argued that the rotation of land adversely affected social stability. But the settlement pattern which developed after the emergency shows that there is no necessary connection between dispersed settlement and either the local population density or the method of bush fallow rotation. Some very large villages formed after the eruption (e.g., Soroputa and Kiorota) retained large groups of immigrants who owned no gardening lands near at hand. The present high rate of mobility between other villages, most of which are much larger than before, is not closely correlated with the shifting of garden sites. Among the Chimbu, by contrast, land use is more intensive, but frequent shifts of residence between scattered hamlets are related mainly to gardening needs.

With the introduction of cash cropping the Chimbu pattern of settlement is becoming more permanent (Brookfield and Brown 1963:98). There is little significant evidence either to support or oppose our belief that the planting of individual coffee plots since the mid-1950s has not been associated with a drop in

178 individual mobility among the mountain Orokaiva. We especially
361 doubt the generalisation that the introduction of tree crops
166 induces the fragmentation of villages into small 'bush settlements'
241 which many observers thought would be established on the site of the gardens. When Agriculture staff first advocated individual cash-cropping among the Orokaiva, the policy was opposed by mission staff who feared that the villages would disintegrate as each grower moved to live near his coffee garden.

This has not in fact eventuated although there has been some movement from large temporary post-eruption settlements like the Isivita villages when immigrants returned to their own land to plant coffee or cocoa.

425 b. Developments related to land tenure

Disparities between the areas in which individuals and groups hold proprietary rights are overcome by individuals acquiring rights to other land through interpersonal relationships. Cash cropping by individuals does not seem to have reduced the flexibility of exchanges and transmission of land rights. Three of the 5 persons who planted coffee on land held by members of our sample are not members of the group holding proprietary rights. Similarly, of 28 people who applied to the local government council for registered areas of cash crop land on 7 blocks held by the sample, 8 were not members of the rightholding group.[1]

[654] The need for such transfers is increased by requests from extension officers and the council to locate coffee gardens contiguously to facilitate pest control, extension services and surveying.

Morton (1962:12) argues that new practices in the transmission of land rights have emerged with the expansion of coffee growing [24] since 1956. Our evidence, however, shows that the significant [178] change has been rather the introduction of a new method of cash [177] cropping. The only experience the Orokaiva had of commercial agriculture previously was of large-scale production on plantations owned or directed by Europeans. They had not entertained the possibility of production on an individual basis.[2]

423 Morton expresses a view widely held among government officers[3]
614 that the introduction of perennial crops is seen by members of the

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[1] Four of the other 20 applications were made on behalf of members absent in employment and 2 on behalf of boys.

[2] See Crocombe 1964:30.

[3] See Minutes of Higaturu Native Local Government Council Meetings.

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7: Rimoldi et al. E,I-5 (1962-1965) 1966 OJ23 Orokaiva OJ23 Mountain Orokaiva Sivepa

SCHEMA OF MAJOR LOCAL MIGRATIONS 1900-1950*

● Extant Village ○ Village now abandoned

[S] Original Centre of Dispersal of Jegese

Double lines on arrow indicating a movement means that village was thereby abandoned
Movements with same date and destination were directed by administration, as was Barakipa move in 1948

*Excluding wartime movements

Relative positions of villages are distorted for the sake of clarity. (See Map 2.) Most prewar dates have a margin of error of at least 5 years: Figures are given only to indicate sequences. Dates most in doubt are marked ?

with some of their co-residents; nevertheless, common residence implies some community of interest and a degree of group solidarity that is reinforced by Administration and mission policies which recognise villages rather than descent groups as functional entities.[1] Marriages between members of the different clan branches within the village reinforce this solidarity, which is expressed in such ways as daily food gifts, co-operation in certain tasks, and joint ceremonial activities.

(b) Social organisation[2]

(i) Descent. Every Orokaiva is recruited by birth into the clan of his or her father. All members of a clan claim, but cannot necessarily trace, common descent from a usually eponymous ancestor. Each clan is subdivided into named sub-groups or lineages which trace their origin to a named ancestor.[3] A lineage comprises, on average, three households. Usually several clans are represented in a single village, members of a single clan (clan branches) being scattered among a number of neighbouring villages. Lineages are much more localised in character, frequently being confined to a single village and tending to occupy one section of it.

(ii) Leadership. The Orokaiva social system incorporates no central authority or hereditary leadership. Instead, it is characterised by 'big men' (asbo dosbo) and an ascendency of elders who have proved themselves equal to the task. Such men command the respect of the community - based upon observed qualities of generosity, diligence, wealth, ability to make wise decisions and skill in arranging ceremonial activities - but it confers no sanctions.

(iii) Residence. Post-marital residence is ideally patrivirilocal, but in practice people have a wide choice between the village of patrilateral or matrilateral kin or of affines, and it may be changed at any time. The composition of individual households within the village likewise varies, although the basis is generally the nuclear family. The distribution of clan branches through a number of villages is closely related to access to the group's land; hence initial motivation for a long-term change in residence

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[1] Cf. comments by Belshaw (1964:277) on villages and descent groups vis-à-vis government policy in Fiji.

[2] For a fuller account see Rimoldi 1966:29-75.

[3] Genealogical depth is slight, descent rarely being traced to an ancestor more remote than the grandfathers of the oldest men.

may be influenced by proximity to a new area of land it is intended to bring into cultivation.[1]

(iv) Rights to land. The Orokaiva social system is characterised by flexibility in arrangements for group membership and for transmission of rights to land (e.g. through adoption). Inheritance is usually patrilineal[2] and various land rights may be distributed at a number of levels of social segmentation - the clan branch, lineage and individual - the relative significance of each varying with locality and, apparently, population density.[3] Further, more than one descent group may have rights in a single piece of land. In many instances the clan branch functions essentially as a reference group, all land being associated with it. However, it may function as a primary right-holding group for those hunting areas distinct from current garden land, typically the grasslands.[4] Priority rights to garden land are normally vested in the lineage; nevertheless, all such land is ultimately identifiable with individuals who may distribute land (and property) prior to their death not only to their immediate family but also to more distant kin.[5]

This markedly influences the pattern of both exploitation of land and transmission of rights. In the low density areas a number of descent groups often agree to exploit simultaneously an area

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[1] Rimoldi (1966:68) found no evidence of the need for new land as a motive for movement. He considers the major motives to be fear of sorcery, disputes between kin and life-crises. It is nevertheless conceivable that the fear or sorcery or disputes might arise from poor yields from over-cropped garden land, which would require a move in any case.

[2] Women are known to hold land only as a form of trust for their children (Crocombe and Hogbin 1963:75).

[3] We do not know whether any causal relationship exists between these two factors. However, the existence in low density areas of primary forest surplus to current garden needs, plus extensive grassland and mountain areas utilised largely in hunting only, might well account for the responsibility for such land being vested in the larger social group, the clan branch. This group's significance has been eroded in the high density areas, where there is little or no land surplus to present gardening needs.

[4] In the high density areas hunting is frequently confined to garden land and individuals can commonly hunt over land belonging to anyone in the village.

[5] For example, sisters' sons (Crocombe and Hogbin 1963:24).

than might have been expected.[1] However, the withdrawal of the relief teams, including agricultural officers, after the emergency, may have left the people in a psychologically and technologically deprived state, thus further inhibiting their concern with commerce.

The instability of settlement consequent upon these disturbances may also have impeded the evolution of such new forms of leadership and effective group action as have occurred among the Tolai.[2] The careers of such new leaders as were emerging, perhaps with wider group loyalties, have frequently ended catastrophically at important points.[3]

(iii) Lack of co-ordination between the Anglican mission and the Administration. Keesing (1952:21-2) refers to the 'delicate' matter of 'Government versus Mission responsibilities' and alludes to the 'rivalry' between them in connection with the post-Lamington rehabilitation programme.[4] These two agencies are the most potent external forces operating on Orokaiva society and their activities and demands are not co-ordinated, thus accentuating the difficulties of implementing a consistent development policy. Their demands on the villagers' time may conflict, and their views on such important matters as the purpose of education, the role of the teacher and the role of commerce are at variance. The Anglican mission has no formal representation at the policy-making levels in the District though it has great influence in the villages.

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[1] Sjoberg, an authority on disaster research, states (1962:363): 'A typical adaption [to disaster in pre-literate societies] is resignation to one's fate. When catastrophe is thought to be engendered primarily by spiritual forces, man can himself do little to alter the course of events apart from recourse to religious and/or magical practices. Recall that he assumes the immutability of the natural-divine order, which includes also the social arrangements about him. Add to this the meagerness of technological know-how of the sort that would be useful in disaster rehabilitation and we see that mute acceptance of one's lot is the logical result.'

[2] See Salisbury 1962:338.

[3] For instance, the 'renegade' leaders hanged at Higaturu and Sangara; the administrative staff, teachers and the twenty priests-in-training who died at Higaturu in the Mt Lamington eruption, and the Orokaiva leader of the co-operative movement who also died at that time. Many of the most talented Orokaiva are serving outside the region in government, missions and commerce.

[4] Belshaw (1951:248) makes a similar allusion.

461 Contracting and casual employment near the village are the most popular forms of paid work, since it is possible to maintain subsistence production and even cash crops at the same time.

(iv) Remittances. Remittances are closely related to the number of absentees. Few Orokaiva have been eligible for skilled work because of the limited educational opportunities available until very recently.[1] Those in employment almost invariably see themselves as being only temporarily absent from their villages[2] and therefore feel the need to maintain kinship links and settle obligations. They normally return to their villages for leave and, if married, may leave their families in the village in the care of relatives, since few employers provide married accommodation.

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431 Single remittances are frequently of the order of $10 in cash or comprise gifts of clothing, tobacco, transistor radios and similar storebought goods beyond the financial reach of most villagers. The recipients say that they would like to reciprocate with gifts of food, particularly taro, but are precluded from it by the problems of posting or air-freighting heavy and perishable goods.

443 (v) Other sources of income. Since Papuans became eligible to
434 hold licences to trade in 1959, several Orokaiva men have estab-
438 lished trade stores. Their stocks are fairly limited and include rice, tinned foods, sugar, tobacco and small household goods. Since 1963, most have obtained their supplies from Oro Ltd and many have shares in this company. A number of the stores have experienced operational difficulties on account of the pressures of kin for credit or special favours, but some of the Orokaiva owners in 1964 were operating at a profit. One such store was established in Inonda in 1963.

525 Gambling with cards is illegal but is nevertheless popular. Orokaiva villagers play among themselves for areca or matches, although they prefer to play for cash against plantation or road labourers and settlers. Villagers sometimes win large sums in this way.[3] A winner is usually expected to return some of his gains to

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[1] Dakeyne (1965:94), however, found a high proportion of skilled men amongst the Yega people, who have had the longest educational experience in the Northern District, with a school at Gona since 1910.

[2] Only two of the absent Sivape men had not sent presents home for several years. One committed suicide in 1964; the other stated categorically that he had no intention of returning to the village, but in fact did return on leave at the end of 1965.

762

[3] A Hohota man won $60 in one session with the Girua block settlers and Dakeyne (1966b:37) cites a case of a Yega man winning $86 from plantation labourers.

491 [499] [361] station with Boru on the main road near Awala and passing within a mile of Sivepe, but it was not completed by the onset of the wet season. It was intended that this would be used by the OCGS and other purchasers of produce. This was the main reason for the Sivepe people's decision to move their village to a site within 200 yards of Sasembata mission station.

777 [743] [87] Sasembata mission is a head station of the Anglican mission. Among its facilities are a church, administered by an Orokaiva priest, a hospital and infant welfare clinic run by a Papuan medical orderly but supervised from the Administration hospital at Saiho, and a primary school with 400 children on the roll.[1] The school includes classes up to Standard V and is headed by an Australian with the assistance of ten Papuan teachers. A small trade store is operated by Oro Ltd at Kongohambo village adjoining the mission station.

621 [342] Sivepe itself is laid out as a line village, with lineage members tending to occupy adjoining houses (see Map 4). The houses have a mean size of 229 sq ft and are built entirely of local materials, with the exception of nails which are now commonly used.

[125] Three clan branches are represented in the village and two of these, the Jegase and Timumu clans,[2] comprised the survey sample (55.3 per cent of the total village population of 114 in January 1964), the characteristics of which reveal them to be representative of the population as a whole.[3]

166 464 The population of the sample declined by 20.6 per cent, from 63 to 50 persons, over the survey period. Ten of the 17 departures migrated to other villages and the rest sought wage employment within the district or in Port Moresby. This continuing out-migration intensified certain characteristics of the village's labour force, for by January 1965, 37.8 per cent of the potential adult male labour force was absent, the majority on a long-term basis in unskilled or semi-skilled work or low-ranking positions in government service.[4] In three cases, wives and children remained in the village and were supported by close kin. In January 1965, there were only two men remaining in the 20 to 34 years age groups.

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[1] An estimated 80 per cent of the children in the area receive some schooling.

[361] [2] Clansmen also reside in twelve other villages, all within a radius of 3.7 miles of Sivepe.

[3] See Appendix 1 and Fig. 4:1.[A] [4] See Appendix 2.[B]

A, [See Category 163, p. 307--Analyst] B, [See Category 162, p. 39--Analyst]

C, [See Category 166, p. 308--Analyst]

Like Sivepe, both sites of Inonda were laid out as line villages. Here the tendency for grouping of kin is more marked but still not rigid (see Map 6). The houses, with a mean size of 282 sq ft, are built largely of local materials, but incorporate some exotic items including nails, and, in certain cases, corrugated iron roofing from nearby wartime dumps. In addition to the residences, there is a rest-house, a copra-drier, a small trade store and a chapel. Brief weekly services are held by a villager who was once a mission teacher and who also owns the store.

In January 1964, the resident population of the village was 35, with 16 adults, a drop of seven since the time of Crocombe and Hogbin's survey (1963:58). The nine households had an average of 3.9 individuals or 1.8 labour units. No births or deaths occurred during the survey but there were three arrivals and seven departures giving a total of 31 people, including 16 adults, in January 1965. In addition, several people from other villages stayed temporarily with kinsmen in Inonda. At first, there were two local clan branches in Inonda, the Andirihaha and the Jego'undi, the latter being represented by a single family.[1] When the village moved in 1964 the Jego'undi man, having virtually no rights to land near the new site, decided to move instead to the nearby village of Hosou, which is built on his land. He, his wife and four daughters were from this point (July 1964) excluded from the daily interviews, which explains the most prominent change, namely the loss of female children, in the age-sex structure diagram (Fig.4:2).[2] In contrast with Fig. 4:1 for Sivepe, Fig.4:2 shows neither males nor females in the 15 to 19 years age group; the largest concentration of adult males is in the 20 to 24 years group, where Sivepe has none. The proportion of long-term absentee adult males was 16.6 per cent in January 1964 (i.e. two out of twelve) and 25 per cent in 1965, the rise being due to the departure of the Jego'undi man. One absentee is normally resident in Port Moresby and seems unlikely to return except on retirement; the other, his brother, lives less than three miles from Inonda at Ijika near Hohota, which is his widowed mother's village, and he constantly asserts his intention to return to Inonda.[2]

The major agnatic links of the Andirihaha people are with Hohota, but extend to Kakandetta and Hanakiro, ten miles away, while

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[1] A third local clan branch, the Horemba'undi, is represented in Inonda by a single household, which is resident through affinal ties and it has no right to Inonda lands, although it is allowed to make food gardens there.

[2] i.e. two of the three 'absentees' continue to reside in subsistence villages, unlike the Sivepe absentees who are all in, or seeking, full-time wage employment elsewhere.

[TEXT CONTINUED ON PAGE 55]

A,[See Category 162, p. 55--Analyst] B,[See Category 162, p. 59--Analyst]

8: Waddell & Krinks B-4,5 (1964-1965) 1968 GJ23 Orokaiva GJ23

Chapter 6

Activity patterns: Sivepa

125

Introduction

The Sivepa survey involved 35 adults (17 men and 18 women). Of these, 23 were resident in the village throughout, the remainder either commencing or terminating their residence during the survey period. In all, a total of 5,310 man-days was covered although, on account of temporary absences and sickness, detailed records were only kept for a shorter period. Of the total available labour time 6 per cent (320 man-days) was lost through absences longer than 24 hours and a further 4 per cent (212.4 man-days) through sickness within the village. However, during a single week in period I, at the height of an influenza epidemic, 29.6 per cent of potential labour time was unavailable (see Fig.6:1).

(a) Temporary absences

A total of 453 man-nights was spent away from the village, or 8.5 per cent of all covered by the survey.[1] An analysis of reasons for absence is presented in Table 6:1. The major single cause, 36 per cent of the total, is visits to ex-servicemen settlers at Sangara, mostly by kinsmen[2] to assist in establishing the block. A further 26 per cent of absences involved garden work, either protecting the gardens from incursions by pigs, or facilitating intensive clearing programmes.

While the fulfilling of social obligations accounts for only 16 per cent of all absences, it involves the largest number of people (24 of a possible 35, compared with 13 for garden work and 5 at Sangara) and is characteristically of short duration, seldom more than one or two nights away from the village. By contrast, the

[1] The difference between this and the figure of 6 per cent for man-days quoted above being that some of the nights involved absences of less than 24 hours duration.

[2] A daughter of one of the sample is married to a settler while a Jegase man from a neighbouring village also has a block at Sangara.

[TEXT CONTINUED ON PAGE 77]

B: Waddell & Krinks B-4,5 (1964-1965) 1968 0723 Orokaiva 0723

Table 6:1

Sivepe: nights absent from the village by cause

		Garden work	Social obligations	Sickness	At Sangara*	External agencies	Other	Total nights absent	Total nights present
Period I									
	Nights	14	43	33	32	19	4	145	2,685
	Per cent	10	30	23	22	13	3	101	
Period II									
	Nights	38	13	-	-	36	2	89	1,169
	Per cent	43	15	-	-	40	2	100	
Period III									
	Nights	67	17	2	128	4	1	219	1,456
	Per cent	31	8	1	58	2	-	100	
Total									
	Nights	119	73	35	160	59	7	453	5,310
	Per cent	26	16	8	36	13	1	100	
Percentage of all nights present and absent		2	1	1	3	1	-	8	91

* On extended visits to or in the employment of settlers.

mean duration of absences at Sangara is 26.7 nights. In the case of such long absences only one member of the household is normally involved so that the routine of gardening activities is not greatly disrupted. 166

As Fig.6.1 demonstrates, some periodic variation is discernible in the pattern of absences. During the first seven weeks of period I absences occurred on only 1.7 per cent of survey nights, but for the rest of the survey a substantially higher percentage was maintained. These first weeks largely coincided with an (abortive) attempt to establish a communal cash crop garden in the village.[1]

The proportion of absences rose to 10.1 per cent during the last six weeks of period I, falling slightly to 7.4 per cent during period II, the main cash cropping season, and rising to a peak of 15 per cent in period III. During this last period over half (59 per cent) involved visits to Sangara.

In analysing absences according to sex, age and cash cropping status some meaningful patterns emerge (see Table 6:2). Men tend to absent themselves more than women, largely on account of their greater dealings with the external agencies (17 per cent of all their absences). [562]

The 25-34 years old age group is distinguished by its very low incidence of absences - less than 2 per cent of survey nights compared with over 10 per cent for all other age groups. Virtually all absences in this age group were connected with social obligations or garden work; no visits were made to Sangara. The mobility of this age group may be influenced by the fact that it comprises young married people with families.

Cash croppers absent themselves less than non-cash croppers, while almost 42 per cent of the former's absences is connected with subsistence garden work and only 6 per cent involved visits to Sangara. By contrast non-cash croppers are not only absent more frequently but spent 55 per cent of all nights absent at Sangara. Since assistance to settlers is normally reciprocated with cash payments or trade store goods (usually food), evidently those with no reliable avenue for acquiring cash within the village context perceive assisting kinsmen on the land settlement scheme as an important alternative source. [434]

(b) Sickness

While sickness and the care of sick people account for a minority of absences from the village, they did result in 212.4 man-days being spent totally inactive within the village and a further 615 464 734 164

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[1] See pp.44-5. 1

[TEXT CONTINUED ON PAGE 78]

A,[See Category 344, pp. 44-45--Analyst]

B: Waddell & Krinks B-4,5 (1964-1965) 1968 0223 Orokaiva 0223

Table 6:2

Sivepo: nights absent from the village by cause and according to sex, age and cash cropping status

	Sex		Age				Cash cropping status	
	M	F	15-24	25-34	35-44	45+	Yes	No
Total nights present	2,629	2,681	826	1,334	882	2,268	3,157	2,153
Nights absent (per cent)	10.3	6.8	11.5	1.8	10.4	10.6	5.7	12.6
Absences - by cause (as a percentage of total absences)								
Garden work	28.0	23.8	2.2	33.3	13.0	40.2	41.7	16.2
Social obligations	15.9	17.1	27.4	45.8	22.8	6.6	21.7	12.9
Sickness	5.5	11.0	-	4.2	-	14.1	1.1	12.1
At Sangara	31.7	41.4	69.5	-	12.0	34.9	6.1	55.1
External agencies	16.6	6.6	-	-	46.8	4.1	27.2	2.9
Other	2.2	-	1.0	16.7	5.4	-	2.2	0.7
Total	99.9	99.9	100.1	100.0	100.0	99.9	100.0	99.9

226 476 branches and to drive the fish into the nets. On both occasions during the survey over twenty people were involved. Operations such as these are initiated by the older men. Participation is voluntary and seems to be based on residence as much as kinship.

342 461 476 Construction of houses generally involves some collaboration in erecting the timber frame and in preparing roofing sheets from sago-palm leaves, but much of the construction is carried out by the housecowner alone. When assistance is received, it may be from a wide range of kin, including agnates, matrilateral kin and affines. The main reason for the size of work group shown as involved in construction at Inonda is the erection of the copra-drier when all the men in the village collaborated.

461 178 It is worthy of note that, except for fishing and sago-making, all activities involving larger work groups are non-traditional activities directly associated with the monetary sector. The largest work groups occur in copra-making and the next largest in cultivation of coffee. As described above, copra-making was [245] initiated by the entrepreneur as his own project but subsequently others combined to make it a village project. Cultivation of coffee is carried out usually by members of the household that owns a garden, sometimes assisted by other kin who have no cash crops or by young unmarried men. There is, then, a clear differentiation between traditional and post-contact activities in terms of the organisation of work groups.

The activity patterns of selected individuals (see Table 7:16)

166 Inumbo. This man is unmarried, aged 21 and lives in the household of his elder brother. He reached standard V at Urura mission school and began training as an aid post orderly at Saiho hospital, but left after eleven months, feeling that his current conditions and future prospects were not satisfactory. He then lived for some months with a relative of the same lineage at Ijika, returning to Inonda for several weeks during periods I and II and remaining permanently from late August onwards. In total, Inumbo was absent for 86 days, 92 per cent of which were on visits either to his lineage brother or, for shorter periods, to other relatives. For 3 of the remaining 7 days he was sick and stayed at Hahoma village, 2 days were spent at a feast, 1 at a party and 1 looking for work at Popondetta.

[461] [404] Inumbo's observed activity patterns seem fairly representative of the behaviour of young unmarried men in the area. Probably his attitudes are also quite widely shared: although he frequently helps his brother and other kin in Inonda and other villages in subsistence tasks and cash cropping and will almost certainly settle in the village when he marries,

● 166 464 461 he expresses at present a preference for paid work and spent over 27 hours, in addition to one full day, seeking employment. However, the only paid work he obtained was on the entrepreneur's construction contract at the airstrip. Since the completion of road construction in the area, paid work other than labouring for settlers has been difficult to obtain. Isemba has sought work requiring responsibility, for instance, as a storeman, rather than casual labouring, but even in Popondetta responsible work is rarely available and there are many other men of similar age and with similar or better educational qualifications competing for the same few vacancies.

512 461 [226] Isemba is active for an average of 49.5 hours per week. His most time-consuming task is fishing, usually with friends of the same age, and this is probably regarded as recreation as much as productive work. It accounts for 20 per cent of the week's activities. Sago-making is also important in the dry season. In the category of other food-producing activities over one-third of the time spent in subsistence gardening is in planting taro, sweet potato and minor crops and one-half in clearing and harvesting. During period III, he made a garden independently of his brother for the first time. This was intended for his brother's wife's use and served as a return for the food he received as a member of the household. Productive subsistence activities account for 21.4 hours a week.

[434] Isemba's main cash-producing activity is paid employment. He also assists his brother and others in their coffee gardens and spends some time in marketing. In fact, he never acquired any cash in the Popondetta market: he threw away unsold <u>sipere</u> (limes) and gave unsold bush-turkey eggs to a friend. However, in November, he caught a 4 ft long crocodile in the Girua River and sold it to a Chinese merchant in Popondetta for $4.50. The 2.1 hours spent on purchasing are partly on his own account and partly as a service to others, since purchasing provides a reason for travelling and meeting friends.

[883] Apart from the category of other food-producing activities, social activities consume most time during the week, with a slightly higher proportion spent on visits than on organised feasts and parties. These visits are brief and distinct from those considered in discussing absences and are one of the most typical aspects of the behaviour patterns of young men. [796] A closely related activity is church attendance, which occupies over an hour a week because Isemba often walks to services at Ijika, again in order to meet his friends. His visits to the aid post take up more time than the average spent even by women with

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[133]

then sweet potato and minor crops. After the Mt Lamington eruption, several rivers flooded and, with the exception of Mamoho's, all the Ikonda people's yam gardens were destroyed. The supply of yams has gradually been increased from those surviving in his garden, but he and his sons are still the only people with large holdings. Mamoho spends a considerable amount of time assisting others in subsistence activities; in particular, he cleared and maintained a sweet potato garden on behalf of the widow and also helped her in fencing, in erecting a yam storage house and in constructing her house on the new village site. He also spent 30 hours helping his son to make sago. His eldest son's wife and the widow often harvest in his gardens and cook for him. Among his other food-producing activities he spends 2.5 hours a week on hunting, using a spear and accompanied by his son's dog; he usually gives the produce to his son's wife.

[224]

Mamoho was never absent from the village for a whole day, but spent 19 days inactive through sickness. Largely because of this, he was unable to attend a number of feasts and spent less time than anyone else in this way. Like most of the men, he spends little time on council work; this and other activities related to external agencies and the monetary sector account for only 4 per cent of his time. In other words, his activities are now almost wholly subsistence-oriented, although he maintains an interest in and encourages others to plant cash crops.

Embogi. A widow aged about 51, Embogi was born in Urio village and retains close links with her kin there. Her first and second husbands, who were brothers, belonged to a subordinate branch of the main lineage in Ikonda. Her third husband, who had one other wife living, died in 1962. She has a son and a daughter from this last marriage, and has remained in Ikonda partly to maintain her youngest son's rights to land inherited from his father. She maintains a separate household with these two children but in August her eldest son and his wife (Marjorie) moved in with her prior to building their own house on the new village site. Embogi's second son (by her second marriage) normally lives with her but for most of the survey was staying with a classificatory father while attending the administration school at the settlement block. Her house was built mostly by this son and Mamoho, the eldest son being absent at the time at his wife's father's funeral feast in Hoherita.

[166]

Although Embogi's working week is considerably longer than Mamoho's, it is shorter than that of most others. However, 80 per cent of her time is devoted to productive

B: Waddell & Krinks B-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

433 M9 [71]

attempts are being made to expand and diversify cash cropping by planting more coffee and erecting a communal copra-drier in Inonda and establishing a communal garden in Sivepe. However, in all of them, serious problems have arisen or the venture has actually been abandoned. These facts point to a certain lack of direction and perception of the most appropriate techniques in the development of commercial agriculture.

(b) The relationship of subsistence to the external sector and the availability of surplus labour

433 M8

Perhaps the most significant general conclusion to emerge from this survey of activity patterns is that the Orokaiva economy continues to be essentially tradition-oriented. Such monetary activities as exist seem to be additional to, and do not replace, subsistence activities. Although the two villages have, since contact, been incorporated into a wider system, individual participation in it remains essentially passive. There is now a real need for money, and for the products that money can buy, and commercial production within the village is perceived as one way of satisfying these needs. Because of the people's familiarity with cash cropping, and of the under-utilisation of available labour, it is not easy to see why it should not have been more extensively adopted.

There is plenty of evidence that the villages continue to be tradition-oriented. In particular, there is little suggestion of 'a reduction in the acreage under subsistence crops, a narrowing of the normal range of good crops and changes in their relative importance' or 'of a reappraisal of the agricultural value of different types of land and soil' or of 'the movement of whole villages to new sites...the movement of individuals from villages which are poorly located for commercial farming to those which are more favourably situated...[and] the departure of individuals or nuclear families from the village to become independent farmers' as have been indicated by Ward (1964:487-93) in the case of Fiji. No distinct socio-economic groups have emerged at the village level. By contrast, in a recent study of village agriculture in Aitutaki, Cook Islands, three economic groupings are identified - the gardeners, gardener-employees (those with part-time jobs) and employee-gardeners (holding full-time positions) - this breakdown in the homogeneity of the communities being considered as one measure of the degree of commercialisation of the economy (Johnston 1967:36-8 and 91-3). Finally, there is as yet no evidence of individual specialisation where 'The planter restricts and narrows his activities in two directions: he concentrates upon agriculture to the exclusion of non-agricultural activities and on cash crops to the exclusion of non-cash crops' (Johnston 1967:60).

[SCS] [71]

[illegible]

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Rimoldi, in investigating the recent history of settlement among the Mt Lamington Orokaiva (1966:39-47 and 65-70), distinguishes

three elements of change, first, a trend towards the amalgamation of hamlets into larger units which assume the formal layout now characteristic of Sivepe, second, considerable mobility of settlements, and third, a high degree of individual mobility. However, the first and second he considers to be largely a function of Administration pressures and of ill-defined aims to improve the economic base of their livelihood (as is characteristic of Sivepe's intended move), and the third to be related to the 'vicissitudes of social relationships' rather than to any connection between settlement and garden sites.

The changes which have taken place in the range and relative importance of subsistence crops largely reflect the need to find a more reliable and adequate food supply during the dry season, although the tendency to increase the acreages of both yams and Xanthosoma at the expense of sweet potato and taro might also reflect a conscious effort by some to economise on time and effort in the subsistence sector.

The survey of activity patterns reveals little variation within the samples in the relative importance of the subsistence and external sectors: even those most strongly oriented to cash cropping are concerned first with achieving subsistence. The two most active people in the Sivepe sample, Linton and Palminus, register an above average level of activity through the whole range of tasks, the manner in which they allocate their time being proportionately little different from that of the sample as a whole. This applies equally to the entrepreneur in Inonda, who spends over half his working week in productive subsistence activities. His entrepreneurial activities are directed primarily towards a trade store which is not particularly demanding in terms of his time. In this respect his cash-producing preferences parallel those of other men where contract or casual work is preferred since, in the absence of strict schedules, it conflicts little with the requirements of the subsistence routine.

There is little difference between attitudes toward cash and toward subsistence crops. In particular the attention given to the commercial trees parallels that given to coconuts, areca, breadfruit and other economic trees associated with the subsistence sector in that, apart from planting and harvesting, maintenance is essentially restricted to facilitating access. The absence of any specialised techniques of arboriculture is carried over from subsistence to cash crop trees, the only distinction being that the cash crops are planted in formal stands. The work routine is much the same in that sustained and regular effort is neither required or given and the duration and intensity of individual periods of cash cropping work differ little from that for productive subsistence work.

While efforts have been and continue to be made to organise communal cash cropping, based initially on the expatriate assumption that voluntary co-operative effort is a feature of the culture and an instrument for increasing productivity, they largely fail. Although the communal rubber planting in Sivepe continues to be worked, this is not a reflection of good management but rather of the intrinsic hardiness of a tree which has been planted in its natural habitat, the forest, and is subject to the depredations of few diseases or pests. In Sivepe, work groups in cash cropping are no larger than in subsistence, although in Inonda they are substantially bigger, perhaps on account of the influential role of the entrepreneur. The point remains that work groups incorporating individuals other than members of an individual's families of procreation and orientation are not typical of subsistence production in this area, with the exception of those activities which physically require the participation of a large number of people as, for instance, sago-making.

In both communities the choice appears to lie between subsistence production plus peripheral commercial activities on the one hand and migration out in search of full-time employment on the other. In Sivepe the latter course is frequently taken, not only by single men, but also by some with dependents, who remain in the village in the care of parents. With 37.8 per cent of the potential adult male labour force absent and a number of dependents staying behind, a considerable burden is placed on the remaining residents in Sivepe. Only 25 per cent are absent at Inonda and no dependents have been left in the village. Although the distinction is not manifested directly in the length of the activity week in the two villages, it probably accounts for the greater incidence of temporary absences recorded in the latter - 17 per cent of total available labour time compared with 6 per cent in Sivepe - in that the slightly higher proportion of adult males to total population makes the subsistence economy less restrictive on individual mobility.

While activity patterns suggest that cash-producing activities are added to the subsistence pattern with little apparent stress, the question does arise as to whether <u>given the existing technology, socio-economic matrix and level of productivity</u> the communities have already expanded their commercial activities to the optimum level. There is no evidence that the expansion of cash cropping and paid work has resulted in any commensurate contraction in the time devoted to non-productive activities. The data confirm Fisk's general hypothesis (1962) concerning the availability of surplus labour. Although the Orokaiva are, by any objective standards, a reasonably active people who spend little time on informal social and ceremonial activities associated with the subsistence sector, and although, perforce, activity is restricted essentially to the daylight hours, there are some 6 hours per man-day remaining apparently unutilised. At present this time is distributed between resting, eating meals and informal socialising within the village.

561 the ones with the largest surplus of production above their immediate household needs. This pattern, in association with the particular roles of the oldest and youngest age groups, appears to support the widely held proposition of individuals building up 'credit' within the community to draw upon in their old age. The data might equally be interpreted as suggesting that most of the transactions are concerned with personal aggrandisement and only the middle age groups are capable of achieving this. Thus, in the exchange of labour services, there is a significant outflow from the 15 to 24 years age group and an inflow into the 55 years plus - that is, from a group where labour is the one abundant resource to another where it is scarce and needed to achieve subsistence - yet the 35 to 44 years group also registers a net inflow. Much of the labour received by the 55 years plus age group was connected with sago-making and this same group accounted for half the sago distributed. Since the individual concerned, within this age group, was unable to collect his own breadfruit and had no other way of reciprocating other gifts, offering one of his sago trees proved an effective way of settling his obligations and, at the same time, meeting his own dry season food requirements while expending little of his own labour.

[556] Each of the three other age groups plays an important role in the flow of specific resources. The 45 to 54 years group largely controls the movement of pigs, one of the main traditional indicators of wealth, but not of products associated with the monetary sector. These latter are divided differentially between the 35 to 44 and 25 to 34 years groups, the first being concerned primarily with cash cropping, from which its revenue is mostly derived and therefore its access to storebought goods, while the second relies heavily on remittances and parcels of goods from relatives in wage employment.

In effect the three middle age groups control the circulation of 'wealth', with that of the 25 to 34 years group being founded almost exclusively on non-traditional goods, that of the 45 to 54 years on traditional, and that of the 35 to 44 years encompassing the two where they are derived from agricultural endeavours (garden produce and cash crops).

<u>The relationships between exchange and the socio-economic status of transacting partners</u>

177 Within the total economic system, of which the subsistence villagers comprise the basic stratum, a number of distinct socio-economic categories can be identified with each playing a distinctive role in the pattern of exchanges. On the one hand there are the institutions or organisations associated with the expatriate community or directly promoted by them - the Administration, the OCGS, the Anglican mission, the trade store, the market, etc. - with which transactions are of a formal nature and operate between the individual villager and others in their roles as members of an institution. On the other

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178 there are those indigenes who have moved temporarily or permanently away from the village economy - to take up blocks of land as ex-
166 servicemen settlers at Sangara or to find employment locally or in one of the main urban centres. With these people personal contact in economic relations persists.

166 Most of the resettlement blocks are less than five years old and still being developed. The settlers remain therefore partly
[434] subsistence-oriented and, with only a limited return from cash crops, their incomes are small. Among the Orokaiva contacts with kin are sustained since many live within a day's walk of their home
[465] villages. Most of those working within the District are employed on a casual basis for salaries of less than $4 per month from which, supplemented by rations, they derive all their sustenance, although plantation labourers frequently establish small gardens of their own. Again regular contact is maintained between them and their home village, or new links are forged, as between mission employees
[434] and neighbouring villagers. Most of the wage earners resident outside the District are permanent employees of the Administration with larger incomes than any members of the previous groups - two young men in Port Moresby were earning $9.35 and $8.27 each per week. For these people visits to the village are restricted to bi-annual leave but contact is maintained through correspondence and remitting gifts.

437 Table 10:15 details the movement of goods and services between the sample and the various groups. As might be expected, virtually all (96 per cent) of the subsistence produce acquired by the sample originates from villagers. Of produce disposed only 73 per cent is directed to villagers and over 3,000 lbs (21 per cent) go to organisations. In fact two-thirds of the latter was consumed by the researchers; however, a significant quantity is purchased by the external agencies. The movement of certain items assumes a rather
[438] different pattern in reflecting the needs and circumstances of the several groups. Virtually all the lime acquired is obtained through local wage earners or Saiho market, and all the fish through hawkers from the coast or, again, through the market. Similarly areca is widely distributed, 13 per cent of disposals going to local wage earners and 11 per cent to the market. While the circulation of such goods is insignificant in relation to the total volume of produce, the dispersal of kin over a wide area facilitates the movement of locally scarce resources. A small but comprehensive range of subsistence produce is disposed to local wage earners, reflecting the felt need among such people to supplement their restricted diet.

The exchange of labour services is, effectively, restricted to subsistence villagers, with physical separation and distinctive work patterns precluding any interaction with the other socio-economic categories. Although villagers do give considerable assistance to settlers on their blocks, this involves lengthy

[TEXT CONTINUED ON PAGE 215]

Appendix 1

Sivepa and Inonda: characteristics of the samples

(i) Demographic

	January 1964	Births	Deaths	Arrivals	Departures	January 1965	Net change
Inonda	35	nil	nil	3	7	31	-11.4%
Sivepa							
Village	114	3	2	3	20*	98	-14.0%
Sample	63	2	1	3	17	50	-20.6%

(ii) Household

	No.	Size		Labour units		With individual cash crop holdings
		Average	Range	Average	Range	
Inonda	9	3.9	1-6	2.0	0.8-3.4	4**
Sivepa						
Village	23	5.0	1-10	2.5	0.0***-4.5	10#
Sample	14	4.5	1-7	2.4	0.8-3.8	4#

(iii) Educational experience of the sample household heads

	None	Prep. to Std I	Std II to Std IV	Std V to Std VII	Std VIII plus	Agricultural training	Technical training
Inonda	3	2	1	1	nil	1	1
Sivepa	9	4	1	nil	nil	nil	nil

(iv) Work experience of the sample household heads

	Period##								
	Under 1	1-1.9	2-2.9	3-4.9	5-6.9	7-9.9	10-14.9	15-19.9	20 and over
Inonda	1	1	nil	2	3	nil	nil	1	1###
Sivepa	3	1	1	3	2	1	1	nil	2#

* Eleven (35 per cent) moved to other villages, the balance sought wage employment either within the District or in Port Moresby.

** One man planted 200 coffee trees during 1964.

*** An aged widow.

However, all villagers have access to a communal rubber plantation, tapped on a rota basis.

An expression of the number of years in paid work (where unskilled) multiplied by 1.5 (where skilled but without responsibility) and multiplied by 2.0 (where skilled with responsibility).

This man served 27 years as a mission teacher and has a total 'work value' of 62.

Both served as village officials (either village constable or local government councillor) for many years.

163 164 591 592 811 464

8: Waddell & Krinks E-4,5 (1964-1965) 1968 QJ23 Orokaiva QJ23

Appendix 2

166
464

Sivepe and Inonda: adult male absentees, by location and employment, December 1964

	Inonda*	Sivepe
Location		
Northern District	nil	5
Port Moresby	1	7
Other Papua-New Guinea	nil	2
Employment		
Plantation	nil	3
Urban	nil	2
Agriculture	nil	1
Cook	1	nil
Police/prisons	nil	2
Technician	nil	1
Clerk	nil	2
Unemployed	nil	1
At school	nil	2

* In addition to the absentee shown here, two families had left Inonda to live in nearby villages.

When the Japanese landed at Gona Mission in July 1942, all the Yega - men, women and children - fled into the bush and made their way to Ambasi, 30 miles to the north-west. There they lived for the next two years, returning to the Gona area in 1944. By 1950 they had settled down again on their seven traditional village sites along the coast between Cape Killerton and the eastern end of Holnicote Bay. One new village was established at Surilai on Cape Killerton.

Clan membership determined the village of residence of each family in the Yega tribe. In some instances, place of residence was determined by membership of a particular sub-clan. Of the eight Yega villages, four were inhabited by male members of more than one clan. The remaining four villages were each occupied by members of only one clan and their wives and children.

After an abortive attempt at communal farming in 1947-52, the large village of Beporo was brought into existence under the direction and guidance of two educated young men who taught that a large village close to the mission church, school and hospital was the 'civilized' form of settlement. Some three quarters of the Yega people, apart from those in wage-work away from home, moved to Beporo village which was expanded to accommodate them. Although a broad pattern of clan residence could still be recognized in Beporo, the clans themselves began to lose their functional identity within the tribe. There was a weakening of traditional kinship patterns of co-operation in everyday activities.

Although their earlier communal farming venture had failed, the Yega were still very much attracted to the idea of making money from cash crops. Accordingly, with the advice of the District Agricultural Officer (D.A.O.), they cleared 15 blocks during 1957-8 and planted them with coffee trees. These blocks ranged from a quarter of an acre to two acres in area; one was planted by a group of six relatives, the remainder by individuals of various clans.

For the most part these coffee blocks were cleared in areas of secondary forest which normally formed part of the land rotation cycle for food crop production. Although they were located at distances of up to four miles from the blockholders' villages, only one man changed his place of residence as a direct result of establishing a coffee block. This man moved to Gatare, two and a half miles inland from his previous home and established a single-family homestead, a settlement quite out of keeping with traditional Yega practice. The coffee scheme failed, partly on account of low prices received for early pickings, and partly because in 1960 a much more ambitious cocoa-planting scheme, the so-called Yega Scheme, was begun. It absorbed most of the energies of the Yega during the following two or three years.

Work patterns

Traditionally among the Yega members of one lineage worked together to clear the forest in preparation for planting food gardens. The cleared patch was subdivided among those who helped with the work. Planting and caring for the growing crop was the responsibility of the individual and his family. This traditional pattern was modified when clearing rain forest for the Yega Scheme when the able-bodied men of all lineages worked together. The cleared blocks were then allocated by ballot and the individual concerned was responsible for planting shade trees, laying out a seed bed, planting out the young cocoa trees, 'lifting' shade as the trees increased in size, and keeping down the weed growth. In most instances, relatives who helped the blockholder with these tasks were compensated. For example, the cocoa pickings on 29 July (see Table 1) by Aubrey and John Livingstone were made from the same blocks as those by Ethelbert and Livingstone on 1 July. Aubrey is a member of the same lineage as Ethelbert and John Livingstone is a son of Livingstone. As part payment for work done previously on the blocks these two men were permitted by the blockholders to harvest one month's cocoa production. Other relatives who had helped with the work would be given a similar privilege.

Late in 1962 and early in 1963 many Yega moved their homes to the new villages of Ononda and Binjapada (see Table 5), the reason given in every case being to live closer to their cash-crop areas. In January 1963, however, the move had not resulted in a significant increase in the amount of time spent on the cocoa blocks.[1] This was because of the time spent building their new houses. Only one man out of 12 spent any time working on his cocoa block during the period 14-28 January. The remainder divided their time about equally between building and work in their food gardens, which were scattered between the coast and the new cocoa blocks.

Several attempts were made to introduce communal labour into the production of cocoa. The first was organized by a blockholder, Wilfred Upena, early in 1963. He and 17 others belonging to five different Yega clans agreed to do a day's communal work clearing rain forest to extend each man's block in turn. As the originator of the scheme, Wilfred's turn was first and an acre of rain forest was cleared on his block on the first day. But on my return a year later no further communal work had been done by the group.

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[1] An unsupervised record of daily work was kept by a man living at Ononda from 14.1.63 to 28.1.63, but it was of only limited value.

A, [For Table 5, see Category 166, p. 43--Analysis]

Changes in the Yega settlement pattern after 1960

361 178 Influenced by rapid changes in land use, the location of Yega residences radically altered after 1950. Figs 1, 2 and 3 illustrate the evolution of settlement up till 1950. In 1950 the Yega lived in small villages spread along four miles of coastline. In 1952-3 occurred the major amalgamation of dwellings into Beporo [166] village already mentioned (p. 29). Members of all clans took part in this move. Although none of the other villages went out of existence at this time, all diminished in size while Beporo grew rapidly. Table 4 shows the estimated distribution of population 161 162

[TEXT CONTINUED ON PAGE 42]

Table 4

Distribution of total Yega population by villages in 1960, 1962, and 1964

361 162 103 161

	Village name	1960 estimated	1962 November	1964 July
A.	Coastal			
	Surilai	60	52	61
	Niniyanda	44	9	5
	Kanaunje	15	17	11
	Basabuga	17	19	14
	Tarebosusu	7	10	Nil
	Banumo	14	8	10
	Gombe	19	15	19
	Siumbago	9	13	Nil
	Beporo	335	275	164
	Gona Mission	7	6	18
	Subtotal	527	424	302
B.	Inland			
	Gatara	6	6	6
	Konje	Nil	6	97
	Otobejare	Nil	8	13
	Imangada	Nil	3	8
	Mumburada	Nil	17	47
	Ononda (D.A.S.F.)*	Nil	5	1
	Ononda	Nil	41	66
	Binjapada	Nil	51	61
	Jamberoda	Nil	Nil	15
	Subtotal	6	137	314
	Total	533	561	616

* Department of Agriculture, Stock and Fisheries indicated that these informants had made no attempt to build houses of their own but were using the facilities available at the D.A.S.F. Ononda settlement.

A. [For figs. 1, 2, & 3, see Category 361, p. 41--Analyst]

161 162 in 1960[1] compared with the distributions determined by personal interview in November 1962 and July 1964.

361 166 242 245 Table 4 and Figs 4 and 5 illustrate the movement of people away from the coastal villages and the rapid increase in number and size of inland villages which followed the implementation of the Yega Scheme in mid-1960. The men interviewed gave two main reasons for this move inland. The men who were allocated a cocoa block moved so that they would be closer to this new field of work; those who were not allocated blocks moved in order to remain near to their relatives.

361 166 The movement inland began immediately after the start of clearing the cocoa blocks. In July 1960 a young unmarried man of Seseko clan moved from Beporo and took up residence in the D.A.S.F. settlement. He was soon followed by others from Seseko clan, many of them from Kansunje and Niniyanda villages. These villages are furthest from the cocoa blocks and, being backed by swamps, have more difficult routes of access than other Yega villages. Convenient village sites were available for the newcomers on two patches of grassland known as Ononda and Binjapada. Seseko clan claimed [423] hunting rights to Binjapada and a Seseko lineage claimed cultivation rights to Ononda which had been used by Seseko members as a food garden some years previously. There was therefore no dispute over building sites. Even when some members of clans other than Seseko desired to move from the coast in 1962-3, they were allocated building sites on Seseko land close to the houses of Seseko members. The growth of Binjapada and Ononda villages is shown in Table 5.

The result of the migration inland was the development of a 'ribbon' pattern of settlement along the Gona-Popondetta road (Fig.5). Binjapada was likewise a ribbon pattern on a side road. The houses in Binjapada were much farther apart than in the coastal villages. This is because the house sites were located close to cocoa blocks (Fig.6).

A development which might have far-reaching effects upon the future Yega settlement pattern was the attempt by several holders of cocoa blocks to locate their dwellings upon the projected extensions to their blocks (Fig.6). As early as November 1962 the holder of block 16 had moved his home from Beporo village to a site on Binjapada grassland which he calculated would be the extension of his block (see Fig.6). By July 1964 his example had been

[TEXT CONTINUED ON PAGE 43]

A, B, [For Figs. 5 & 6, see Category 361, pp. 45-46--Analyst]

[1] Calculated from the census taken by the author in 1964. Some degree of error is possible because of the movement of paid employees and their families.

Table 5

Permanent residents of new villages of Binjapada and Ononda
As at December 1962 (to nearest month)

Informant	Village of present residence	Months since move	Village of last residence	Village of birth	Clan	Marital status
14	Binjapada	24	Beporo	Kanaunje	Seseko	M
1	"	12	Niniyanda	Kanaunje	Seseko	M
9*	"	12	Niniyanda	Kanaunje	Seseko	S
2	"	2	Niniyanda	Kanaunje	Seseko	M
4	"	2	Kanaunje	Kanaunje	Seseko	M
5	"	2	Kanaunje	Kanaunje	Seseko	M
6**	"	2	New Garara	Old Garara	Andere	M
7	"	2	Kanaunje	Kanaunje	Seseko	M
8	"	1	Surilai	Kanaunje	Seseko	M
24	"	0	Beporo	Basabuga	Gena	M
25	"	0	Beporo	M/S	Seseko	M
26	"	0	Beporo	Basabuga	Eupu	M
15	Ononda	12	Beporo	Kanaunje	Seseko	M
16	"	2	Beporo	Banumo	Seseko	M
17	"	2	Beporo	Banumo	Seseko	M
18	"	2	Beporo	Banumo	Seseko	M
3	"	2	Beporo	Gombe	Jambapa	M
10	"	2	Beporo	Banumo	Seseko	M
20	"	0	Banumo	Banumo	Seseko	M
21	"	0	Beporo	Beporo	Sambori	M
22	"	0	Beporo	Beporo	Jambapa	M
23	"	0	Beporo	Beporo	Jambapa	M
12	Ononda (D.A.S.F.)	30	Beporo	Banumo	Seseko	S
11	"	12	Beporo	Banumo	Seseko	S
19	"	12	Beporo	Banumo	Seseko	S
13	"	2	Beporo	Gombe	Kurou	S

[732] * Brother of informant No.1, whom he helped. He was a deaf mute and had not been allocated a cocoa block.

** He is a non-Yega man who was accepted into the Seseko clan of Yega. He was allocated a cocoa block in the Ononda Scheme and his son was adopted by a Seseko man from whom the boy could inherit land. At the time of the second visit to Yega in July-August 1964 this man had rejoined his own people and his block was reallocated to a Yega man.

[423]

[425]

361 followed by the holders of blocks 14, 18 and 46.[1] In the development of the new settlement pattern at Binjapada, the existence of
166 an elongated grassland area lying roughly parallel to the cocoa blocks cannot be ignored. The absence of such a grassland area in the vicinity of the western section of the cocoa blocks was one of the main reasons why no similar 'shoestring' village developed there. Holders of blocks in the western section built their new homes either in the village of Ononda or in smaller hamlets beside the Gona-Popondetta road at distances up to two miles from their blocks. Those who built in Ononda were in general men with no previous cultivation rights to garden land close to the cocoa
361 blocks. After establishing their homes in Ononda village most of
166 these villagers cleared rain forest in the Ononda area, thus
241 establishing their cultivation rights to nearby areas of land.
423 Villagers who established new homes along the road, on the other hand, in most instances built upon or near to land over which they possessed cultivation rights. To the men in this group, proximity to food gardens was a powerful subsidiary reason for moving inland.

Extension of the Yega Scheme

178 The foregoing description shows that the Yega Scheme was a
245 major factor in recent changes in Yega land use, land tenure, cash income, work organization and place of residence. The process begun by the Yega Scheme generated further change, particularly amongst those Yega who did not obtain cocoa blocks at Ononda.

245 In February 1963 many Yega were disappointed because they had no individual area of cocoa. It had already become apparent to most of them that a half or quarter share in the block of a relative would return them very little income; all those who had missed allocation of one of the Ononda blocks were, therefore, very eager to clear a further block. Clearing did, in fact, begin on a new block parallel to and south of the Ononda block, the week the author left the area in mid-February 1963. However, very soon after this, the Yega organizer of cocoa planting, Napoleon Aiga, was posted by D.A.S.F. to another district, and instead of continuing with another 'block' development, people began clearing and planting in scattered blocks. Seven blocks totalling about eight acres were planted in this manner. Several aspects of these plantings require comment.

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[1] According to the author's rough pace and compass traverses, two of these men had in fact built their dwellings on neighbouring blocks. Accurate surveys were therefore needed in order to avoid future difficulties.

245 423 All plantings were made on the south side of Ononda Creek in the area which the Yega claimed because it was their Bowori (extinct) clan land but which the Ahora also claimed by right of conquest. The Yega decided to reinforce their claim by occupying at least a portion of the disputed territory (Fig.7).

241 245 423 [614] [613] A large area of rain forest was cleared for food gardens in addition to the cocoa blocks planted. Permission to clear was in all instances given by the land controller, Nixon Kairembora. Swiddens were cleared by members of Sambori (1), Jambapa (5), Konambo (1), Eupu (1) and Seseko (3) clans. Cultivation rights to the land on which these swiddens were made would then be vested in the lineages to which the individual gardeners belonged.

166 361 245 241 One instance of change of residence as a result of these new clearings was noted. Three Jambapa brothers built their homes on Jamberoda grassland near which they had cleared a swidden and planted food crops and cocoa (about half a mile south of Ononda village and well into disputed Yega/Ahora territory). These houses were the furthest extension of the ribbon pattern of settlement developing along the Gona-Popondetta road; this hamlet typified the Yega trend away from large nucleated settlement to a farmstead pattern in which homes were dispersed on or near the main garden and cash crop areas.

245 423 In March 1964 a group of 23 Yega men, only one of whom had been allocated a cocoa block at Ononda, decided to clear another large tract of rain forest which would then be divided equally among the participants in the scheme. The site chosen for this new block-type development was Berojou near the south-west Yega/Beuru boundary. This boundary had been declared by the Land Titles Commissioner, surveyed, and marked by cement boundary posts. Though final siting arrangements for the individual blocks had not been completed it was expected that blocks would be approximately 10 chains frontage by 20 chains depth (frontages double those of the Ononda blocks).

245 423 614 602 The Berojou scheme differs in two major respects from the earlier Yega schemes at Ononda. Firstly it was sited on land over which certain clans, Jambapa and Kurou, had recognised rights of allocation and secondly all members of the group concerned in the development were members of these two clans or had close affinal ties with them. Men related to Jambapa were allocated blocks on Jambapa land while men related to Kurou were allocated blocks on Kurou land. These relationships illustrate the way in which rain forest was traditionally cleared by the Yega. A close affinal tie was usually essential before a person could be invited to join another group and clear rain forest belonging to another clan.[1]

[1] Ten men in this group planted the land of other clans. In six cases their mothers were members of the clans on whose land they

245 476 Work on this scheme had not progressed far at the time of observation because of unseasonable weather. Underbrush and small trees had been cut by each individual on his block but it was decided to wait for dry weather before cutting the big trees by communal effort. All Yega would then be invited to help and helpers would be recompensed after the clearing of each block by a feast given by the blockholder and his family.

245 [242] [484] [487] As with the Yega Scheme, the advice and help of Agricultural Extension Service officers was requested and given. The site was inspected and soil suitability evaluated before the Yega started clearing. However, although the layout of the Berojou blocks closely resembled the Ononda blocks, they are half an hour's walk along narrow footpaths from the Gona-Popondetta road, the only vehicular road in the area.

245 36 166 The people concerned in the scheme lived in various places. Most lived in the Konje area, one at Mumburada, one at Gatara, while eight lived in Beporo and one further away at Gombe. However, it was likely that the Beporo and Gombe people would move inland in the near future. There was at the time no talk of moving home sites to the new cocoa blocks at Berojou.

Conclusions

241 245 178 423 The clearing of rain forest for planting blocks with permanent tree crops whose produce was to be sold for cash was a radical departure from traditional Yega land usage. The Yega Scheme incorporated traditional principles of land tenure and work organization with modifications to meet the changed circumstances of today. Features deriving from traditional precedents were:

[476] [464] (i) the use of communal labour to clear the forest, and the subdivision of the cleared area among those who helped in the work;

(ii) the absence of any documentary record of the transference of rights to individual right holders (although this was later provided under new legislation);

[464] (iii) the organization of group labour for certain tasks even though recruitment of members might not necessarily be based on purely traditional criteria;

245 413 214 602 (continued)
planted, in one case the wife was, in one case the father's sister's husband, in another the half-brother by a different father and in the last case, the father of a half-brother.

Historical background

160

The history of the Inonda people has been marked by frequent shifts of residence. They trace their 'origin' to an area known as Aramba which is located about seven miles to the south-west. In the early years of this century, probably about 1910 or earlier, the Aramba people were attacked and defeated by certain Sangara clans. The survivors, mostly members of the Andiriha clan, fled in various directions; some went to Kakendata, some to Jegarata, some to Hanakiro and others to Hohota. The group that finally settled in Inonda, however, fled to Wauta (near Doboduru No. 1) where they were given asylum by the Sauhaha clan, and where some of the refugees married Sauhaha women. Each of the scattered branches of the Andiriha clan may now be regarded as a separate sub-clan.(1)

The Tandai'undi clan, with whom the Andiriha had previously fought against the Managalas, were also driven out by Sangara and were living not far from Wauta. About two years after the conflict with Sangara the Tandai'undi people moved back inland and established Sambogo village on the banks of the Sambogo river.(2) They were soon joined by those members of the Andiriha clan who had been staying at Wauta. The Andiriha sub-clan acknowledged that the Tandai'undi held prior rights to the land by virtue of previous occupation.

At the time of their eviction from Aramba the Andiriha clan were living adjacent to another clan known as Jego'undi. The Jego'undi also fled, and though informants are not agreed as to where they went at first, all confirm that one Jego'undi man joined the Andiriha people at Sambogo.

There was some dispute between the people of the Sambogo village and those at Urio (the next village downstream) as to the boundary between their respective lands. The dispute was taken by the leader of the Andiriha sub-clan at Sambogo to

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(1) The terms 'clan' and 'sub-clan' are defined on pages 16-17.

(2) The Andiriha are shown as living at Sambogo in 1915 - Chinnery and Beaver, 1915, Appendix 3.

the Resident Magistrate, Mr. Oelrichs[1] who decided in favour of the Sambogo villagers. He is said to have advised the Tandai'undi and Andiriha people to re-establish themselves in separate villages, though the reasons for this are no longer remembered. The Tandai'undi clan moved westwards and set up the village of Ajoro. Some of the Andiriha established the village of Jawahe on its first site and the balance of the Andiriha and the Jego'undi man and his family set up the village of Inonda on its first site. We will call this Inonda I. Some years later, when a flood destroyed the village at Jawahe, the inhabitants moved the village to its second site adjacent to Inonda I. Later again, due to a drop in population, the Jawahe people were absorbed into Inonda I.

Inonda and Jawahe were established on the land which had previously been disputed between the Sambogo and Urio villages. Although the Tandai'undi had rights superior to those of Andiriha in this land, they transferred some at least of their rights to the Andiriha in return for traditional valuables, pigs and two women. Both of the women concerned were members of the Andiriha clan. The Jego'undi man did not contribute much to the exchange and his descendants recognise their rights as being subordinate to those of the Andiriha.[2] The whole of the area acquired will be referred to henceforth as the Inonda lands.

At the time of the Japanese occupation in 1942 the Inonda people left the open plain and withdrew up the Sambogo river to a site near that of the former Sambogo village. They remained there for ten months and returned to Inonda about May 1943.

After the Mt. Lamington eruption in 1951 the Inonda

(1) Mr Oelrichs was Resident Magistrate of the area from 1910 to 1913. He had earlier served there as an Assistant Resident Magistrate from 1902 to early 1903.

(2) Some of the Andiriha people in fact claim that the Jego'undi family was absorbed by Andiriha and that "we were all one sub-clan". Later, however, a dispute arose and a visiting patrol officer advised them to keep the sub-clans distinct.

people were shifted about two miles eastward to a site adjacent to the wartime Inonda airstrip. People of several other villages (including Ajoro, the home of the Tandai'undi) were also resettled in the same area for safety. We will refer to this as Inonda II. During 1952, when the danger of further eruption was considered to be over, they shifted their village to Inonda III which was approximately a mile closer to their planting lands. In 1956 the people who had been temporarily resettled for safety at Inonda moved back to their respective villages. The local people then moved to their present site, Inonda IV, which is midway between their food gardens and their coffee plots.

Demographic and social structure

At the time of our survey, of a total population of 45 living in 8 households, 23 were members of the Andiriha sub-clan and 5 members of the Jego'undi sub-clan. The remaining 17 belonged to other clans. Of these 17, 8 were wives of members of the Inonda sub-clans and another 7 were relatives of these wives. The remaining 2 were the children of the sister of an Andiriha man who had come with their mother on a visit.(1) The number of persons in Inonda households ranged from 3 to 10 with an average of 5.6. There were 4 nuclear, 1 polygamous and 3 extended families.

The term 'clan' will be used to refer to the large patrilineal Orokaiva descent groups, each of which claims descent from a common ancestor but cannot trace it in fact. Each clan has a common name and a common plant emblem or erahu.(2) The clan name (frequently that of the founding ances-

(1) Of the 17 persons who were not members of the Inonda sub-clans, 4 came from the Kougaria clan of Urio village and 7 from the Ouambe'undi and other clans of Hoheriha village. This reflects the marriage links with these villages as six of the nine wives came from Urio or Hoheriha. Marriage links with Urio are said to have been maintained for more than two generations, but those with Hoheriha began in the last decade.

(2) Sometimes known as hemiha or hemiu. For a detailed description of the nature and function of the emiha see Williams, 1925. The emiha of the Andiriha clan is tiraai, any plant tied in a particular knot.

CHAPTER 4 - WORK ORGANIZATION

Characteristics of the work force

At the time of our survey there were 23 persons of 15 years of age and over living in the village. One old man was very frail, and one woman who was visiting her brother while she recuperated from an injury, did no productive work. There were no girls between the ages of ten and fourteen, and only three boys. Two of the boys were temporary visitors and did not stay for long and the third, a lad of about ten years, was never seen to engage in any productive work. Children of nine years and under frequently helped with domestic chores like carrying water and firewood, but they took little or no part in agricultural production. This left a work force of 11 men and 10 women, though one man died during the survey, thus leaving equal numbers of each sex.

As shown in Table 9 below, all Inonda household heads except one had been employed,(1) and they had spent at least part of that time away from their home village. With the exception of those employed as teachers, village councillors or village constables, almost all the men had gone away to work before they married (and marriage was consequently delayed for these men). There was no pressing economic reason for young single men to remain in the village, for subsistence gardening is primarily women's work and such men's work as there is to do can usually be done by the head of the household. In fact the people have come to regard a trip away to work as a necessary prerequisite to adult life. It gives an opportunity to earn money (much of which is saved in order to acquire a bride on return to the village) as well as prestige, and the one man who had never had paid work was mocked on that account. Only one Inonda man was employed away from the village at the time of the survey. He was a single man who was working in Port Moresby (and was not included in the survey).

(1) These were three men who were not heads of households. Two were old men who had not had any paid work as it had not been available in the time of their youth. The other was a young man who had spent 4 years as a medical orderly. Three women had been employed - two had spent a year each as teachers and one had spent a year in domestic service.

position will be insecure.

The man who resides in the village by virtue of the fact that two of his daughters are married to Andiriha men has been invited to plant coffee in Inonda but he considers the risk of future dispute too great to do so. He is therefore planning to return to his village of origin to plant cash crops and has already begun clearing there.

The one man who has planted cocoa on Inonda land did so, not on his own lineage land, but on that of another lineage which has no adult members at present. But the mother of the children whose lineage holds primary rights to the land has objected strongly and has succeeded in stopping him from expanding his plantings. One other Andiriha man staked out land and planted shade for cocoa, again on the same land of the other lineage mentioned, but has been prevented from planting.(1)

Partly as a result of the uncertainty of their tenure the villagers are again considering shifting the village site.(2) Several possibilities are being considered. Some wish to move to land held by an Andiriha sub-clan which lives at Hohota and which has close links with the Inonda sub-clan. These point out that they have no certainty of tenure for their cash crops on the existing land, whereas at Hohota there is land which is

(1) This dispute resulted from the fact that when the last adult member of the lineage died, his wife remarried and her new husband "adopted" her children. Those who moved onto the land reasoned that as the children had been adopted, the local branch of the lineage had died out and the land was available for use by any member of the sub-clan. The mother, on the other hand, claimed that the children would not inherit land from their adoptive father but from their born father. She won her point by threatening to complain to Native Affairs officers who, the villagers said, would undoubtedly have supported her.

(2) This is not the only reason for moving, and the prevalence of sorcery in the present location is felt to be responsible for the supposed excessive death-rate. (There has in fact been a decline in population from 60 in 1949, to 49 in 1957, 45 in 1960 and 45 today). The Allied Geographical Section (1942, Appendix G) gave the population as approximately 120 in 1942, but the accuracy of this figure is in doubt.

the undisputed property of the Andiriha - albeit a different sub-clan. The occupying sub-clan is said to be agreeable to the shift, partly because one of the Inonda families originates from a lineage of the sub-clan at Hohota. Another alternative is to move to Ajoro, the "home" village of the Tandai'undi clan. The Ajoro people are said to have invited them to come, and to have offered them land on which to plant their food crops. Some felt that residence with the Tandai'undi would reinforce their existing hold on the land they at present use, but others fear that if trouble arose between them and the Tandai'undi they may have to leave.(1)

A further possibility which has been considered is for the village to split - the Jego'undi going either to Mosou to occupy the land given them by their mother's brother or to Urio to join their mother's lineage, the Andiriha who originate from Hohota lineage removing there, and the balance of the Andiriha, who have close kinship links with the Ajoro people, moving there to live. A final possibility is to remove the whole village back near their food gardens at Inonda I. The actual outcome will no doubt depend on the internal relations between villagers and the external relations between this village and the others in the vicinity.

The past history of the Inonda lands and the current problems encountered with cash crop planting there indicate that there are serious tenure problems at the sub-clan level. It appears that the definition of sub-clan or village boundaries and the rationalisation of land rights in such a way that only one clan, sub-clan or village has rights in any one area would be conducive to higher productivity and less dispute. The Native Lands Commission has the power to define boundaries and rightholding groups on the application of any of the parties claiming rights in an area. But in fact there is one Native Lands Commissioner for the whole of the Northern District (with a population of 51,000) and he is required to do his own surveying, collection of genealogies and clerical work without

(1) The people are clearly disturbed by the knowledge that the government survey recorded the Inonda land as "belonging" to the Tandai'undi.

463 472 602 366 old age or other need. The system was not geared toward capital accumulation, nor was the bulk of material reward retained by the man who made the effort. To achieve maximum economic efficiency a modern entrepreneur must disengage himself to some extent from his kinship obligations. As Table 9 shows, a number of the entrepreneurs studied have physically removed themselves from the village to live near their cash crops, or have built close to, but outside, their villages. Thus while the vast majority of Orokaiva people live within a village, most entrepreneurs among them do not, and all the most successful live outside their home villages.[1] Independence, however, may place the entrepreneur in a vulnerable position. He has reduced access to the security provided by traditional ties, reciprocal obligations and religious rites within the village community, and there are at present no alternative provisions for social security.

Table 9 suggests that there may possibly be advantages in trading away from one's own village and where one is not dependent on one's villagers as customers. All three traders within their own village have had little or no success, and all the most successful groups are outside or away from their home village.

Table 9

Location of store

Location	A	B	C	D	E	F	G	H*	I	J	K	L
Away from own village (i.e. own villagers not usual customers)	'			'				'	'			'
Close to but outside own village		'					'			'	'	
Within own village			'		'	'						

* H's village is to be shifted to the present location of his trade store. He resides within his own village.

[166] Half of the least successful traders were still living in the village of their birth, whereas 75 per cent of the traders in both groups II and III were not living in the village in which they were born.

463 472 366 Of the sixty-seven indigenes in the Northern District holding trading licences, twenty-three are shown in the government records

[1] Likewise all four entrepreneurs studied by Crocombe (1967:5) lived outside their villages.

262 The principal food at Ombi-Tara is taro, while other foods of importance include sweet potatoes, yams, bananas and plantain, edible pit-pit (saccharum edule) and a wide variety of leaves and bush cabbages. Bread-fruit, pandanus, betelnuts, coconuts, pine-
[224] apple, pawpaw, watermelon and sugar cane are also eaten. The main sources of animal protein are provided by wild pigs, birds, flying foxes and the occasional cuscus. These add variety but provide
231 comparatively little food. The keeping of domestic pigs in vil-
657 lages has been outlawed for health reasons by the Ilimo Local Government Council which serves Ombi-Tara, but one old man, a former clan leader, kept three pigs under his house.

342 Readily available natural vegetation provides housing materials. Timber is used for the framework and walls, blackpalm or timber for the floor, and thatched sago leaves for the roof. Houses have an average life of about four years.

162 The population of Ombi-Tara by clan and location is presented in Table 8.

Table 8

Resident population of Ombi-Tara by clan and location, January 1966

Clan	Ombi			Tara			Blocks			Total		
	M*	F*	C*	M	F	C	M	F	C	M	F	C
Mumu	20	20	56	1	1	2	6	7	13	27	28	71
Kuei	3	3	7	11	8	20	-	-	-	14	11	27
Total	23	23	63	12	9	22	6	7	13	41	39	98

M* Adult males. F* Adult females. C* Children.

[166] [167] [464] Note. In addition there were seven Ombi men and six Tara men absent from the area working for wages, that is, roughly one man away for every three remaining at home.

361 The new village sites also reduced walking time to the gardens.

618 722 The war of 1939-1945 affected the Yega in several important ways. Their territory became one of the major battlefields of the Pacific War. Every person migrated from the area with the exception of one old crippled woman who somehow managed to survive for eighteen months in the bush. Almost all able-bodied men served in the army or labour corps and the women and children lived at another Anglican mission about thirty miles to the north. When they returned, they found all buildings, and any belongings that they had left behind, destroyed and most of their coconut palms cut down or damaged by gunfire. There were some compensations. The Australian Government paid thousands of dollars in war-damage compensation for all trees and property but, more important, the stimulus of travel, and meeting and working with Australian and American soldiers, gave the younger men in particular a broader view of life which triggered off changes in their traditional economy. In addition, the transfer of the Administrative headquarters from Buna to Higaturu resulted in the construction of a major road to the port of Cape Killerton and brought the Yega into closer touch with the outside world than ever before. As a result, between 1945 and 1950, about twenty families left their re-built villages and moved east to found the new village of Surilai at Cape Killerton (Fig. 9). Men living at Surilai have since found regular employment on the Government wharf at Cape Killerton.

648 701 722 727 729 659 179 177 491 361 166 [464]

178 433 464 466 Major post-war changes in the Yega economy have resulted from their attempts to increase their cash earnings. Before the war many men worked as indentured labourers on plantations or on the wharves at Port Moresby

(P. 13-A) [TEXT CONTINUED ON PAGE 14]

245 177 b) The production of crops specifically for sale.

[654] [657] c) The acceptance by the indigenes of supervision and advice from European and indigenous members of the Agriculture Department: people with whom they had no kinship ties.

[423] d) The location of houses on the blocks.

e) The registration, by some individuals, of freehold title.

245 It is unfortunate that the scheme which appeared so successful in its early stages should have failed largely because of circumstances outside of the people's control.

464 [434] [166] Many Yega have made no attempt to earn cash from commercial agriculture. From the time of earliest contact with Europeans some of them have left home to work for wages. At the present time, almost one third of them are absent working, studying, or as dependents.

464 178 592 166 Forty-four per cent of all Yega men are away working. Those who are married are accompanied in almost every instance by their wives and children. This situation represents a marked change from the pre-1940 years when many Yega men worked as indentured or casual labourers and could not take their dependents with them. Nowadays most Yega work in semi-skilled or skilled occupations in [466] which family accommodation is often provided by employers. Even if accommodation is not supplied, the breadwinner's earnings are apparently adequate to provide living quarters for his wife and children; frequently town accommodation is of poor standard but evidently family life is preferred to separation.

871 178 The main factor in the marked improvement in skills is education. The educational opportunities which have been available to the Yega for nearly fifty years have been exceptionally favourable, when compared with [797] those of most other New Guineans. A mission school has operated in the area since 1909; since 1932 (except for war years) it has had at least one European teacher permanently on the staff. This educational background has [464] enabled the younger generation of Yega men to take advantage of opportunities for employment in posts of responsibility and higher income which have become available in increasing numbers during the post-war period.

[P16-B]

18: Dakeyne K-5 (1962-1964) 1969
OJ23 Orokaiva OJ23
Yega

464
166 Absence from the village, particularly by working-age males, is now an established social pattern among the Yega. Fifty-one per cent of all adult males are absent, in paid employment. For unmarried men, the percentage is seventy-seven. Of 100 adult men working away from the village, twenty-three had been away for ten years or more; in four instances separation from the village was virtually complete, three having never revisited their village and one only once in thirteen years. This means that many Yega can no longer be classified as 'temporary' absentees. However, most wage-earners still return to their village for annual holidays.

434
431
178 All wage-earners send a portion of their earnings to their older kinsmen who remain at
554

[P.17-A]

628 guests, it appears that they were friendly but rather formal. As
594 will be shown later, all arrangements in connection with Ilimo
731 camp were made between the government and the Ilimo people; the Orokaiva had no forms of organisation, in 1951, through which the refugees could have negotiated directly with Ilimo. The hosts [659] generously supplied food, grew extra food in special plots, provided abundant building material from their land, and a site for the camp and helped with the preparation of the camp while the evacuees still lived at Wairopa, in return for which the government made various gifts which Ilimo evidently regarded as adequate payment. At no point, during the existence of the camp, did the refugees develop an organisation which dealt directly with the Ilimo people. Thus, the only contact between hosts and guests was on a social level.

The camp was built at some little distance from the village. Refugees who had friends and relations in Ilimo used to go over to the village and visit them. There was for instance, at the time of the eruption, one Sivepo man resident at Ilimo; thus some Sivepo people paid visits to the village. There was an Easter celebration at the camp to which the village people came. When the camp broke up, the government gave a feast to the Ilimo people, on behalf of the evacuees, in the usual Orokaiva style.

12] If we wish to answer the question to what extent contact between different "tribal" groups (or distant groups) of Orokaiva has become more intensive since the eruption, we cannot confine ourselves to contacts occurring in villages such as Sivepo or Ilimo. Here the pattern suggested in the previous pages has hardly [178] changed. The changes have occurred by the development of new organisations (to which I shall refer later) through labour migration and through urban development.

464 As I am at present discussing only unorganised contacts
166 between villagers, I can give only one clear instance of changing
633 attitudes and this is in Popondetta itself. Popondetta, the new administrative centre of the Northern District, has about 4,000 [162] inhabitants, almost all Orokaiva; among its inhabitants all parts of the Northern District are represented, including Sivepo. The Sivepo people had many relatives there, mostly hailing from the Sasembata district, and employed in some regular job in the town. These jobs are partly in personal service to Europeans, but also in light industry, the retail trade, public works and public service, and go far beyond the little employment that was available in pre-eruption Higaturu (with a population which, judging from aerial photographs, can hardly have exceeded that of a large village).
484 Popondetta is preeminently the place where intelligent men from
521 various villages can gather informally to discuss political and other
633 public questions, and develop a wider interpretation of the situation of the Orokaiva which is learnt by the men from the villages when they pay occasional visits to Popondetta. The town generates a new

CHAPTER II: Socio-Economic Factors

Section 1: Age, Sex and Marital Status

In this chapter, the study of internal variations will be continued, by a consideration of the human resources available to the villages and their economic productivity. A statistical analysis of the population by age, sex and marital status (see Table 16) shows that the labour force lacks a proportionate number of young men in early adulthood; the number of men in the vigour of life is somewhat smaller, in Sivepa, than the number of women. The reason for this change is that young men leave the village to earn money elsewhere. They often do this before marriage, so that the bachelors' houses tend to be occupied by a much smaller number than formerly; but after they are married they usually do not at once settle down in the village. It is unusual nowadays for a bridepri..e to be paid in full at the time of the wedding. Usually this payment is delayed; the young husband goes out to work for it and after one or two years he sends back money and it is paid. At the one brideprice payment I observed in Sivepa, the groom was not even present. He was at his job in Port Moresby and the role of groom was taken over by another man from the same lineage--a married man with six children, as it happened, who duly cut the firewood and carried the water required for the entertainment of his affines. Even after the bridewealth is paid, then, the husband continues to work at his job, rarely seeing his wife as travel is expensive and leave infrequently granted.

Because of these infrequent visits, young wives have few children, but they receive regular gifts of money from their husband. Eventually, the husband returns home; it is hard to say just what makes him decide. Before the age of 30 he usually starts to establish a family, and he then stays home continuously, to look after his garden and his coffee. He may occasionally go back to town for a few months to earn money, but judging by the few examples I saw, he is not always successful at finding a job and even if he does so, he takes an early opportunity or uses an early excuse, to return home, carrying home some presents for his family and perhaps a little money. The family does not seem to be too troubled about the loss of earnings that result from his return. Some men manage to find accommodation for their families in town, in which case they all migrate.

This generalised picture needs qualifying. There were six Sivepa women (out of nine married women with absent husbands) who received regular gifts; three of these women were living in the household of a single man while another family head had under his control two

A [See Cat. 116, pp. 221-222--Analyst]

114 kind enough to show me this study in manuscript, I shall utilise it
464 here. The general question with which Mr. Waddell is concerned is
whether earlier students of societies depending on shifting agriculture
are right in saying that such societies, at least in fertile regions,
● [166] have a considerable potential labour surplus. He proceeds to argue
[167] that, in the light of detailed data on the use of time in Sivepe, what
potential labour surplus there might once have been has already been
taken up by labour migration of male adults (which, for his sample, he
puts at 37.8%). Waddell takes issue with Fisk (1962: 465) who defines
economic activity as comprising only the production of food, clothing
and shelter, and argues that, given the existing socio-economic matrix,
all the other activities listed on his time charts (see Table 5)
should be regarded as economic because they buy status and security.
[412] He also takes issue with Salisbury (1962: 216-20) who proposes that
[461] the change from a stone-to-steel technology in the New Guinea Highlands
has resulted in a saving of two-thirds in the time allocated to specified
axe-using tasks and who concludes from this that a vast potential labour
surplus is thus created. Waddell shows, by a quantitative study of
the allocation of time within activities, that only 38.5% of the time
allocated to an activity is actually given over to the main task, and
even if one includes ancilliear, and other productive tasks, this
raises the proportion to less than 50% of the total time devoted to
that activity. (See Table 17.) As steel implements are used for only
a portion of productive tasks, they did not, Waddell argues, make a
crucial difference to Orokaiva work patterns.

114 If at the time of Mr. Waddell's study (1964), the potential
464 labour surplus in Sivepe was small, how was it possible to fit in such
461 new additional activities as the growing of coffee? Mr. Waddell was
241 in an excellent position to discover this as at the time of his survey
seven of 15 households surveyed engaged in cash-cropping; he was therefore
able to inquire how this affected the time spent on subsistence food
production. As it happened, the median time spent on subsistence
gardening by the whole sample equalled precisely the median time
spent by the cash-cropping households. (12.6 hours per week, vide
his Table 5:5) It appears from the table I derived from Mr. Waddell
(my Table 17) how the cash-cropping families fit in this extra work:
they spend a great deal less time having rests and meals. While non-
cash croppers allocate only 28.4% of the time within activities to
their main task, the cash-croppers allocate 50.6%. Though Mr. Waddell
gives interesting explanations which account for part of this discrepancy,
even if full allowance is made for these, the fact remains uncontestably
that the cash-croppers simply work harder.

114 Mr. Waddell proceeds to show, by a detailed psychological
241 assessment of the cash-cropping individuals, that they are indeed the
177 most acculturated and industrious members of the community. This
seems to suggest a considerable heterogeneity in working habits as
between the members of the community. The author clearly shows this
A,B heterogeneity to exist as between the sexes and between different age
[See Cat. 116, pp. 209-210, 223-224, respectively--Analyst]

CHAPTER VI: Addition and Loss of Community Members

Though the population of Sivepa has increased between the years 1951 and 1967, this increase is less than might have been expected after the settling in Sivepa of two additional Jegase families and six Sorovi households. An analysis of Table 16A will show that the net population increase in 16 years corresponds very closely to the increase due to the immigration of 15 Jegase and 26 Sorovi people into Sivepa. The 1951 figures showed 40 children who, today, should range between the ages of 17 to 35; 15 of these were boys. Looking at the present Sivepa population, we find only six men of that age group and only three of these were children in Sivepa in 1951 (the other three are immigrants). This depletion of the 17-35 year age group is one of the most strking features of the present population structure.

The second striking change is in the number of children--there are almost twice as many of them in Sivepa today as there were in 1951. It seems likely that this increase should in part at last be due to the improved health services: the monthly clinics, with the possibility of immediate referral of young children to the Saiho hospital, do save a number of lives, even if the mortality rate is still high.

The migration of young women into and out of Sivepa is a continuous process due to virilocal residence; a far more significant demographic process is the outflow of men as a result of labour migration. Rimoldi reported that ten male siblings and sons of householders of his (Jegase-Timuma) sample were employed outside Sivepa in 1962; in 1966, I found that this figure had risen to 12. I have only included men who had been residents of Sivepa and who had left, as adults, to find work. By this criterion, it would not be possible to class absent brothers and sons of Sorovi men as "labour migrants from Sivepa," as these men had never lived in Sivepa at any time but had been residents of Garombi before they became labour migrants. There were, at the time of the survey, no labour migrants of the Seho clan. The fact that Jegase had many labour migrants while Seho had not even one certainly accentuated the relative dearth of contact with the outside world that characterised Seho. On the other hand, we should not read too much significance into it. It so happened that the Seho men came from very small families; most of them actually had no adult brothers living, and though they had many children, the only adult children they had happened to be girls. Thus they collected a disproportionate amount of bridewealth but could not contribute much to the external labour market. The Seho men were not actually as cut off from the world as these statistics might suggest: all had sisters' sons and sisters' husbands, real or classificatory, who were labour migrants; two had themselves been labour migrants earlier in life. In

A [See Cat. 116, p. 225--Analyst]

[167] a village as small as Sivepe, statistical samples will sometimes show
[166] freakish features of which the sociological significance should not be overestimated.

[468] Nine of the 12 labour migrants came from two of the families, namely the family of the village constable and that of the man who was councillor for Sivepe over the years following 1956. The other migrants came from three further Jegase families. The reason for all these movements was, of course, the absence of employment opportunities [813] close to Sivepe. One absentee from Sivepe was a boy of the Seho clan who was at a secondary boarding school (Martyr's school, at Agenahambo).

Dissension was the reason for both the major migratory movements into Sivepe. The two Jegase families who came to Sivepe around 1956 were originally residents of a hamlet near Binduta called Korinasusu. All the other families of Korinasusu belonged to a different clan (Usohu). Conflicts between the groups arose; one Jegase man felt sure that deaths in his family were caused by Usohu sorcery and left. Another Jegase man was then accused of sorcery against Usohu and [621] decided it would be wiser if he left too. At one time, such families [657] might have set up a separate hamlet, but the government pressure towards consolidated villages led to their settlement at Sivepe, where there were a number of other Jegase families.

I was not able to reconstruct precisely what led to the Sorovi migration. Two of the men who settled in Sivepe were brothers of the Garombi feast leader and the other men were linked with these two by affinity or close friendship, as well as common clan membership. [593] It is a general principle of Orokaiva family structure that the oldest brother in any family has absolute control over the family land and other family assets; he takes the place of the father. There is no sort of appeal against his decisions. He has the duty to "look after" his younger brothers and see that they prosper. If he fails in this task, the younger brothers have only one recourse; namely, to leave. In practise, the oldest brother is often compelled to divide up the patri-money when such a split-up occurs. Certainly this is what happened in the present case. The younger brothers renounced their elder's protection and started out on their own. Again, due to government pressure, they joined an existing village rather than starting a new one, as they might once have preferred.

Sivepe was chosen for several reasons. One of them undoubtedly was the link that existed through the three women from Ajoro who had been captured and taken to wives by men from Garombi and Sivepe. The descendants of these men regarded themselves as bound by common ancestry, because the three Ajoro women were regarded as being closely related (nobody could say how, but the fact that they came from the same village was said to be sufficient). This was a link between Sorovi and one lineage of Jegase; there were also specific links with a Seho lineage. Furthermore, as was often emphsised to me, there were links of hereditary friendship. Also, the families had land very close to Sivepe.

657 Garombi was a somewhat delapidated settlement. The government
621 and the council were said to favour its dissolution and incorporation
into Sivepe and Binduta. This project was favoured by Sivepe which
166 was keen to enlarge its size. Sivepe could see that under the modern
dispensation, the greatest favours always went to the largest villages.
167 The large villages had shops, water supplies, a club house; the coffee
truck stopped there, and so on. There was also a prize for the most
improved village; here, too, size was thought an asset. In council
elections and many other contemporary situations, size meant power.
Sivepe was therefore eager to absorb these families, hoping that more
would follow. During the year of my visit, there were several meetings
about this with Garombi people; rumours of further migration were
hopefully spread around.

161 In contrast, Inonda slightly dropped in population in the period
under consideration. There was the same rise in the number of children;
[464] there was little loss through labour migration (only one man in 1962;
as Crocombe and Hogbin report; and still only one today). The decline
[166] in the number of households was due to dissensions; the households
shifted to neighbouring Ureo and Hohota. Perhaps this decline may be
[621] explained by the strong leadership exercised by one family--socially,
economically and ritually--so that anyone who fell out with that family
more or less had to leave. In contrast, Sivepe has several strong
personalities who had to make compromises with one another. Sivepe's
post-eruption development was shaped not by one dominant figure but
by several, each making a specific kind of contribution. Certainly,
there was factionism, but there was also balance between the rivals.
In the next two chapters, I shall deal with these two kinds of
internal pressure: the character of the key personalities and of their
rivalry.

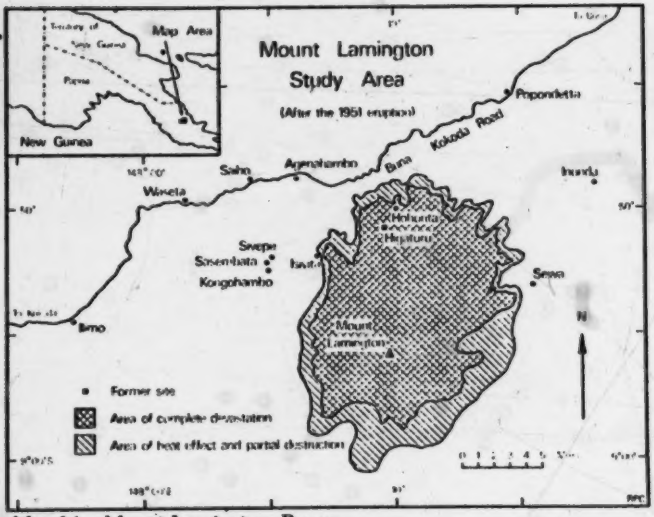
621 station. The Horeopa leader, who was the owner of this land, then
361 invited these other clans to come over and make Hohorita into one
united big village. When the clans came over in 1959, they followed
the same pattern as the Sorovi immigrants followed in Sivepe: they
arranged their houses so as to maintain, in a subtle but unmistakable
way, their own identity. They formed in effect a second rectangle
which formed a harmonious continuation of the first rectangle but which
was separated by just half a chain. In 1966, the front and the back
half of Hohorita held separate feasts, each inviting a different
village. In 1967, the councillor made plans to clear the gap between
the two halves, remove the two old houses which emphasised the separation
and build new houses in the cleared area to join the rows together.

Around this time, the Sombou people began to establish themselves
in Hohorita, leaving their old village behind. I think it was they
[764] who filled the gap between the rows. The councillor had long been at
[775] pains to close down the small villages of Sombou and Kakita and Sombou
was finally persuaded after the death of an old migrant who had remained
a pagan. As he could not be buried in the Christian cemetery, and
people did not feel disposed to carry out the full involved ritual to
placate the ghost, they preferred to shift their village. (They thought
that pagan ghosts are far more dangerous than Christian ones.)

361 Hohorita, like most resettlement villages, lies along the main
368 road to Popondetta, 11 miles from Popondetta, seven miles from Saiho
hospital, three miles from the Higaturu Council chambers. The school,
conducted by the mission on Hohorita station, offers an education to
the end of Standard 3.

621 The two feasts held in 1966 were intended to introduce into
433 Hohorita the pigless era advocated by all councillors. I arrived a
434 month or two after the feasts and by that time two very small pigs had
appeared which were there for a special reason I have forgotten.
Sombou and Kakita still had a normal complement of pigs. Coffee was
[231] a somewhat bigger enterprise in Hohorita than at Sivepe. The trees
[245] were much better looked after, and there were far more of them. Every
man had his coffee garden and an income of $100 per annum from coffee
was normal. Young trees were also being planted at a much faster rate.
Compared to Sivepe, there were very few wives whose husbands were
● [166] permanently away working. The reason for this was that there are a
number of plantations quite close to Hohorita and those who needed
to work to pay off bridewealth, etc., could do so without going too
far afield. Money to pay taxes and other regular outgoing expenses
464 would come from coffee. Men who were able to find skilled jobs,
167 clerical or professional work usually had their wives with them. An
important resource of Hohorita, not shared by Sivepe, is the avail-
ability of good jobs within a reasonable distance; the fact that Hohorita
families do not break up in the same way as Sivepe ones indicates that
such separation is probably economically motivated. It is necessary
for a young man to earn his trophies, so to speak, which in the modern
world means money, but if he can do it without a prolonged absence
from home, he prefers staying home.

24: Schwimmer E-5 (1966-1973) 1977
OJ23 Orokaiva OJ23



Map 14. Mount Lamington, Papua.

survivors, established camps to house them, and set up a volcanological observation post. Acting on technical advice that further explosions were to be expected, the administration at once restricted access to a fairly wide area surrounding the crater, thus forbidding most of the fugitives to return to their homes. It was at this stage also that the administration called in two anthropologists, Felix Keesing and Cyril Belshaw, for advice on what should be done with the now homeless population.[7] Shortly after the two anthropologists left the scene in May 1951, volcanological studies indicated that the active, paroxysmal stage of activity of Mount Lamington had ceased and hence that a large part of the restricted area could be resettled. In March 1953, it was possible to reduce the restricted area still further, to a circle of 2 miles surrounding the crater. As a result of these events, virtually all arable land in the district was in use when I visited in 1966–1967. There were no displaced communities in the proper sense of the word. There had been movements of villages from the crater area to consolidated settlements in the vicinity of paved roads, but here convenience

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rather than security was the main motive. Villagers were able to use the land they had occupied before the eruption.

The Orokaiva case was therefore anomalous in a comparative study of community displacement. There was no new physical or social environment to which the Orokaiva had to adapt. There was, however, a very traumatic experience and a temporary displacement. Moreover, the eruption did permanently change some significant geographic features of the district: the network of roads, village sizes, village locations in relation to paved roads, the location of the administrative center and institutions like the hospital and mission. As these facts have been fully covered in my earlier report, in this chapter I treat them briefly and then turn to a somewhat broader but related question: How does a cataclysmic event such as this eruption (and the temporary relocations that followed) affect the structure of Orokaiva society?[3]

My research included three intensive studies of single villages. The relocated village on which the fullest data were collected was Sivepe, situated 7 miles from the crater, on fertile, well-watered, well-drained volcanic loam, with a population density of 180 persons per square mile. Like all the villages west of the crater, Sivepe suffered hardly any casualties but the people fled in panic and were accommodated in the evacuation camp at Ilimo, a few miles west of Kumusi River near the road to Kokoda. They stayed at the camp until May, after which two of the local clan groups returned home while the third was relocated in one of the large villages established along the main Buna–Kokoda road after the eruption.[4] This third clan group returned to Sivepe early in 1952. Sivepe was rebuilt less than 1 mile from the old site. The most important immediate consequence of the eruption, as far as Sivepe was concerned, was the establishment of a large mission complex at Sasembata, 1 mile away. With the assistance of surrounding villages, the mission built a large school, a large church, and a hospital. One reason for this development was the establishment, by the government, of a large village for victims of the eruption. This was built at Kongohambo (maximum population 900), a quarter mile from the mission station. The mission services remained after the Kongohambo evacuees had returned to their own areas shortly after 1953.

For Sivepe, therefore, the eruption led directly to two highly important event sequences: first at the evacuation camp; later in rela-

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tion to the mission station. The government had demonstrated in the most tangible way that it accepted broad responsibility for the people's welfare in a time of crisis and would act with great generosity in such circumstances. The mission, which likewise had established close relations with the people of Ilimo, had subsequently remained to develop those relations.

As a control group for the study, I used the small village of Inonda, 12 miles from the crater and outside the restricted zone. Inonda differed from Sivepe in that its population was never evacuated or relocated. It continued to use its own land. The comparison of Sivepe and Inonda thus provides a measure of the effects of actual relocation as distinct from other experiences the two villages had in common. In Inonda only one-fifth of the land is arable; none of it is as fertile as the volcanic loam of the Mount Lamington foothills; rainfall is lower than in Sivepe and so distributed that lengthy droughts are not uncommon. Drainage is inferior while population density is only ten persons per square mile.

Inonda acted as host for the population of Sewa village who fled their homes on the morning of the eruption. Among the fugitives was a mission teacher who set up a school in Inonda. When he was later transferred to another district, Inonda pleaded fervently and successfully to get him back. Today Sunday services are given by a lay preacher and children attend a mission school several miles away which teaches up to grade two.[19] Interaction with government and mission authorities was far less intensive at Inonda than at Sasembata.

The third village I studied was Hohorita (population 348), 7 miles from the volcano, with soil largely similar to Sivepe's, good rainfall, good drainage, and a population density of 135 persons per square mile. Hohorita is made up of the survivors of the Sangara tribe, once 4,000 strong, which was almost entirely wiped out by the eruption. The survivors were evacuated to camps along the coast and then allowed to return to the boundary of the restricted area, where they built a village called Irihambo. They were ordered to leave this village some years later (as it was situated on crown land intended for the settlement of Australian ex-servicemen) and then established Hohorita in 1957–1959. The Hohorita people, like other relocated groups, had had intensive contact with government and mission personnel. An unusually large number entered skilled occupations, partly because the San-

of the evacuation camp provide an interesting case study in the relation between administration and Papuan ideologies.

Several frightening explosions and floods occurred in February and early March 1951. These vindicated the administration's restricted area policy, which kept the mountain slopes out of bounds. But after the period of acute volcanic phenomena was over, Orokaiva pressure on Mr. Kaad, administrator of the Ilimo Camp, grew steadily. The opening up of restricted areas began as early as April 1951, so that the population of Ilimo began to decline sharply in that month—from 2,000 to about 1,000. It declined to 500 before the camp was closed in May. Although the speed of resettlement did not actually conflict with administration policy, Kaad freely admits that the pace was forced by Orokaiva pressure.

This speedy return to the land was prompted largely by fears which rapidly began to overshadow the Sasembata villagers' fear of the mountain. In part, these fears were religious. Separation from the land meant separation from ancestral spirits who were left altogether untended when the whole community lost access to the land. Proper birth rites and ritual care for infants became impossible, as was ritual care for the dead, for both must be performed on the taro field associated with certain deceased consanguines. On the sociojural level, the migration of an entire agnatic group was dangerous since it could activate residual rights over land which were held by other agnatic groups.

It is likely that the same anguish about separation from the land would have been felt by most swidden agriculturists in the same circumstances. Such anguish cannot be fully explained by the religious and jural system prevailing in one culture alone. My purpose in this chapter, however, is more limited. It is to relate Orokaiva ideas about the eruption to Orokaiva ideas about land and spatial movement.

These ideas are part of the structural patterns to which I referred above: the weakness of corporate groups and the emphasis on the exchange system (see also Rimoldi 1966; Schwimmer 1970a, n.d.). At least half the land in Sivepe and nearly all the land in Inonda is occupied by persons other than the agnatic corporation acknowledged to be the "original" owners. Occupation of such land arises mainly out of use rights granted by these owners to nonagnates. In practice such use rights often become heredi-

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1. In the Mount Lamington case, the institutional approach would produce results somewhat similar to Lessa's in his excellent paper "The Social Effects of Typhoon Ophelia (1960) on Ulithi" (1964). The major innovations over the last thirty years were due not to the eruption but to the Japanese invasion, the subsequent expulsion of the Japanese by Allied forces, the introduction of large-scale cash cropping, increased urban migration, and the development of officially supported indigenous political institutions.

   The exchange theory approach of Blau and Barth has been followed to some extent in the present essay, but as Garbett (170:225) remarks in the essay already referred to: "Unless one wants to treat situations as simply another kind of 'small group' in an extra-laboratory setting for the testing of propositions from exchange theory, one's findings have to be related to, and set in, a wider context presumably studied by other methods."
2. For semiological discussion on the Road Code, see Lévi-Strauss (1958:chap. 5) and Leach (1970:chap. 2).
3. As an illustration of connotative systems, Barthes (1964a) analyzes a full-color advertisement for grated cheese, spaghetti, and tomato paste and shows that the items in the picture are so displayed to connote all the delights of a carefree life in sunny Italy where foods are sweet, fresh, unadulterated, and perfect in appearance.
4. The relationship between signifier and signified suggested here may not be peculiar to "the savage mind" but universal, as is suggested by Lacan (1966: 493–528).
5. One of the first useful studies of regional colonial macrosystems known to me in New Guinea ethnography is Burridge (1960), which indicates clearly the modalities of conflict and alliance in the Papuan–administration–missionary triangle. Extremely important also is Fredrik Barth's work on polyethnic systems (1969) and on forms of regional organization in New Guinea (1971).
6. The term "Pelean eruption" is applied to the type that occurred at Mount Pelée (St. Pierre, Martinique) in 1902. A large mass of ash is projected rapidly into the stratosphere to form an expanding mushroom-shaped cloud. The base of the column begins to expand rapidly as clouds of incandescent ash (the *nuée ardente*) avalanche down the slopes. The *nuée ardente* is lethal because of sudden damage to the respiratory system caused by inhaling hot (200°F) dust.
7. The reports written by these two scholars (Belshaw 1951; Keesing 1952) led to the inclusion of the case of the Mount Lamington Orokaiva in the project directed by H. G. Barnett and entitled "A Comparative Study of Cultural Change and Stability in Displaced Communities" (1961).
8. Here and throughout this essay I use the term "structure" in the sense of Lévi-Strauss (1958:chap. 15).
9. I have used British terminology in most of this essay as it seems hazardous to adopt American terms in a British-French conceptual framework. Where I use clan, American anthrolopologists would usually write "sib." The term "local clan group" refers to a coresident segment of a dispersed clan (or sib). A full discussion may be found in Schwimmer (1970a).

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572 bond is respected by both sides and utilized for purposes of mediation. The
628 friend is not an ally in war, but his person is sacrosanct.

Hereditary friendships are more likely to fade naturally and quietly than to die violently in a quarrel. On the other hand, they may become converted
621 to affinal bonds or lead to co-residence, in which case an entirely new pat-
572 tern arises. It is possible for migrants into a village to have no bonds other than those of hereditary friendship with their chosen hosts. But once co-
●[166] residence is established, the new arrivals soon become involved in intra-community politics along the lines suggested by Watson (1970): one of the existing factions woos the new arrivals to its side. A strong bond soon develops between the immigrants and the faction into which they are drawn. Intermarriage is likely to follow. A study of the composition of Orokaiva clans (see Schwimmer, 1970a) suggests that they are most often composed of a number of groups differing in local origin. These groups did not generally bear the same clan name prior to settlement, and sometimes they had no relatives at all in the village where they settled. (Still, it would be more usual for at least some members of the migrating group to have connections in the new place.) In the case of the Sorovi people who migrated to Sivepe in 1966, these connections were often of the fictive (friendship) *apa/eambo* type.

572 *Apa/eambo* and *jao* relationships are inherited bilaterally; that is, passed on to both the sons and the daughters of the partners. The only restriction is that both members of the partnership must be of one sex; hence if partner A has only sons and partner B has only daughters, the partnership will die. Similarly, it may die if the age differences in any generation are too great. Even so, under bilateral succession, one would expect that people would recognize far more of these partnerships than in fact they do.

We don't know for how many generations they actually last. Friendship bonds are remembered exactly as long as genealogical bonds – for two generations senior to ego – but some may in fact be more ancient. Friendship bonds are most likely to be kept up when partner A has no kinsmen in partner B's village. Thus, they fill gaps in the network. They are put under strain when hostility develops between the two villages, although even then the friendship bond often survives.

Friendship Obligations and their Ideological Basis

572 (a) *Apa/eambo* or *namei*. The ceremony of receiving a guest friend differs
431 in some ritual features from the hospitality shown to affines and to con-
594 sanguineal competitive exchange partners. When the latter pay formal visits, gifts are made on arrival. Sometimes, the guest does not sit down or allow his string bag to touch the ground until he is satisfied with the gifts offered. This is especially true if the partners are to reconcile a quarrel. Amicability begins after business is concluded. The gifts, in such cases, are made by the